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ORIGINAL ARTICLES.

SOME UNRECOGNIZED RESPONSIBILITIES OF PRESS AND STATE IN CONSERVING HEALTH.*

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On the medical profession devolves, by general consent, the task of looking after the hygienic welfare of the people. That it has unhesitatingly accepted that task, and conscientiously disposed of it to the best of its ability, appears from medical history—from its records of devotion to the abatement of epidemics, to the prophylaxis of disease, the lessening of its severity and the shortening of its course. Ever incident to the work of the medical profession has been self-sacrifice and philanthropy. The more broadly the laws of self-conservation are taught the people, the less work the profession gets from the people. But does that thought lead to any hesitancy on the part of the profession in its pristine endeavor to lessen suffering—either actual or possible? Not a whit.

The motives of such professional endeavor may occasionally be put to question; its reasons and deductions may occasionally be side-tracked into error, requiring revision or retracing of steps—but, like the mills of the gods that slowly grind, the ceaseless study and work of the profession bears fruit; progress is sure, and step by step, mile-stones of discovery and accomplishment are passed that, in the vistas of the past, seemed but as filmy dreams. What is but a fancy of today becomes in time a consummation devoutly wished.

There are practical problems now facing us that equal in importance any the profession has yet solved. Some are so familiar to us that they seem the natural order of things, and are scarce thought of on that account. Some, thus overlooked, are far-reaching in their influences, fearful in their consequences, often intimate and personal in their contact.

Among those that deserve the attention of the medical body is that of quack medical advertising in newspapers and magazines.

It is the general policy of the

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state to protect its people—and this, whether the people individually wish to be protected or not. If a burglar breaks into a citizen's home and steals, he is pursued, prosecuted and imprisoned, as a result of the united endeavor of both the citizen and the state, the newspapers meantime lending their assistance in aid of the procedure.

If a confiding denizen of the country visits the city and incidentally purchases a gold brick made of brass, he may not be active in the publication of the event or the prosecution of the evil-doer, preferring retirement and quiet introspection; nevertheless, the state is just as zealous in its activity in this instance as in the other, in its endeavor to apprehend and punish the malefactor; and it impresses the retiring citizen, if it can, into the service of prosecution. The newspapers assume no indifferent attitude toward the culprit and his retribution. They cry "stop thief" as loudly as they are able, even to the embarrassment, perhaps, of the mortified purchaser of the gold brick.

The newspapers are active partisans of morality and justice in such cases; they cry out in wild acclaim against the bunco-steerer, the boodler, the bigamist, the burglar and the swindler—save when that swindler assumes the relation of a regular medical advertiser. Then they not only do not proclaim against him, but are active contributors to the making of his fortune. They are, indeed, almost his sole reliance, the medium through which he keeps in touch with his prospective victims, the innocent public. No matter how villainous and false the concoction of such an advertiser's mind and pen may be, it is accepted by the newspapers, is set up and presented in as alluring a style as possible, and in prominent position. The quack's thrilling word-paintings of imaginary diseases and symptoms are only exceeded by the marvelous efficacy of the remedy which he brings forward (at one dollar a bottle) to combat them—the remedy that never fails; that he alone knows or has invented; that has reclaimed thousands of afflicted after they had been given up by their friends and regular medical attendants.

The truth of all this absurd and blatant nonsense—as it shows itself to be on its very face—is impliedly vouched for by the paper that presents the advertisement. It cannot deny the responsibility of this fact, try though it may to hide behind the statement that it does not assume responsibility for all that appears in its columns. The inexperienced reader does not always discriminate between the advertisements and the news columns. In fact, the news managers provide against such discrimination, frequently, by making such unworthy advertisements resemble as closely as possible the regular news material of the paper, or by setting it up as telegraphic matter.

Barefaced fraud it may be, extravagant in its wild distortions of the simplest truths of physiology or pathology, absolutely misleading and dangerous in its teachings—it is all one with the newspaper management; the malicious purveyor of quack nostrums is accorded the same welcome, prominence and implied sanction that are given the legitimate and worthy advertiser. He is taken bodily into

the family of self-promoters. And this is a part of the vaunted "power of the press."

Successfully deny their responsibility? The press is *particeps criminis* in presenting such fraudulent material. It cannot to the slightest degree gainsay the charge. It divides the spoils of the swindle, keeping for itself a goodly portion in the shape of fat advertising fees, and yet detracting none from the emoluments of its partner in the fraud, the quack advertiser.

Of the two parties of this unholy alliance, which is deserving of the more vigorous condemnation? The knave who, probably, has been a devotee of false pretenses all his life; who practices medicine through the mails in this manner without ever having seen the inside of a medical college; whose conscience never was affected to the degree of a sincere twinge, but whose only thought, as in Weir Mitchell's "Autobiography of a Quack," on being caught and punished for a crime, is that he should have been more cautious in its commission, and that he "will be more careful next time." Is this the partner that we have a right to expect much of, and condemn in corresponding degree when we find that he betrays our trust, promises great things, but sells us the cheapest of valueless concoctions? Or is it the great modern daily newspaper, rich in its o'erweening success, in its power for good (and, alas! for evil), in its fattening circulation, in its far-reaching influence, its ambitious teachings, its self-proclaimed unceasing war on things unholy and erroneous? Which of the partners, I ask, is deserving of the severest condemnation for engaging in such business? The one that ever claims to be both the teacher and exponent of respectability, or the one that is generally recognized to be the dregs of society, an outcast from decency by the mere fact of his calling? I leave the answer to you, without misgiving as to your conclusion.

Listen to one of these false prophets as he brays from the secure embrace of any one of a number of our great dailies, never failing in the Sunday editions: "I will give $1,000 if *I fail to cure any cancer or tumor* I treat before it poisons deep glands or attaches to bone. . . . No x-ray or other swindle. , . . *Any lump in woman's breast is cancer* nearly always." This forceful claim and horrifying generalization on tumors of the breast is re-inforced by an illustration of a devil-fish bug that is supposed to typify cancer, with its "roots" reaching out in every direction. Woe to the woman who has a "lump in her breast" unless she goes straightwith to Dr. Quack and receives his balm that never fails.

The motto of the New York *Sun* is, "If you see it in the *Sun* it's so;" and at the same time the *Sun's* advertising columns contain burning tributes to the appropriateness of "pe-ru-na for the society woman" at any season of the year, toning the system in the summer more than a vacation, and curing colds in the winter. The New York *Herald*, that aristocrat of newspaperdom, presents glowing advertisements of "Radium Radia," "the greatest remedy ever discovered for rheumatism, neuralgia, coughs, colds, sore-throats, sprains and swellings." In the same issue in which this same

paper lifts its hands in holy horror at the actions of a diploma-mill, it prints the advertisement of that self same mill. Our sturdy and usually reliable old *Globe-Democrat* of St. Louis prints a page on Sundays that reminds one of a rogue's gallery, so numerous are the pictures of eminent sure-cure men—honest, all, and true; that is proved because it is so stated in each advertisement that goes with the picture. Moreover, they are philanthropic, because not one will accept any money for advice or for treatment, the medicine—and the adverment,probably—being the only things charged for.

"Is that box of salve worth thirty-five dollars?" asked an anxious young man of a druggist friend of mine. He had just paid that much for it to one of the advertisers in the above named Sunday gallery, one proclaimed (in capital letters, of course) that his advice was FREE. The young man tthough that the salve must contain gold—which it evidently did, for the quack.

But, had he known it, he was getting off easily. With the able assistance of good newspaper advertising, a "Doctor" Kane and his assistant in New York took $9,000 from a carpenter, selling him a so-called radium solution, at $1,200 per thimbleful. Both of these swindlers were finally arrested and are now in the penitentiary; but their co-partners in the deal, the newspapers, are still carrying on business at the old stands.

"A prominent magistrate of New York," declares *Collier's Weekly*, "calculates that many times as much money is secured under false pretences through grossly fraudulent publications in newspapers as is secured by burglary." Think of it! And at the same time, try to estimate the relative expense and attention bestowed on the prevention or restriction of the two crimes. As *Collier's* further says, "No man is allowed to practice medicine without a license. If he does he can be arrested. If, however, he puts up a certain amount of wood alcohol and gives it an alluring name, he is allowed by our enlightened government to prescribe it to people all over the country whom he has never seen. In this enterprise he is assisted by newspapers of every grade."

The out-and-out misrepresentations of such advertisements appear on every hand. The advertisement that lauds Lydia E. Pinkham's vegetable compound explains Lydia's wonderful ability in treating all women (none of whom, of course, has she ever seen (strictly "absent treatment" this) as follows: "No physician has had such training or such an amount of information at hand to assist in the treatment of all kinds of female ills. This is the reason why Mrs. Pinkham, in her laboratory at Lynn, Mass., is able to do more for the ailing women of America than the family physician. Any woman, therefore, is responsible for her own suffering who will not take the trouble to write to Mrs. Pinkham for advice." This is from the advertisement running in the publications in the country, and all the while the stately monument of Lydia E. Pinkham stands at Lynn, Mass., marking the decease and burial of that estimable lady in 1883!

Dr. A. J. Read recently made a

demonstration of the alcoholic qualities of Peruna, Hostetter's bitters and other cheap whiskey-and-bitters concoctions. A tablespoonful each of Peruna, Hostetter's bitters, Pinkham's vegetable compound and beer was placed in separate bottles, which were connected by rubber tubing to small burners; they were warmed, and the alcohol gas coming from them was ignited. The three patent medicines gave a flame from two and a half to four minutes, while the beer for only twenty seconds. With this experiment in mind, we can better appreciate the sequence of events that recently occurred in the family of a conscientious and highly esteemed clergyman, whose family became much worried over his unaccountable actions and demeanor. The family physician was called in, and held serious converse with him, after which the following colloquy occurred between the doctor and the eldest son:

"Harry," said the doctor, "do you know what is the matter with your father?"

"No. We sent for you to tell us that."

"Well, I am sorry to tell you that your father is suffering from chronic alcoholism."

"Chronic alcoholism! Why, that's ridiculous! Father never drank a drop of liquor in his life, and we know all there is to know about his habits."

"Well, my boy, its chronic alcoholism, nevertheless. How has his health been lately? Has he been taking any medicine?"

"Why, for some time, six months, I should say, father has often complained of feeling unusually tired. A few months ago a friend of his recommended peruna to him, assuring him it would build him up. Since then he has taken many bottles of it, and I am quite sure he has taken nothing else."

While to the laity the monetary aspects of these swindling schemes may appeal as unjust and deserving of condemnation, we of the medical profession know that it is by far the least injurious and least serious aspect of the question. We meet with other phases of the question—those in which the poor, deluded patent medicine habituees have gone the gamut; have descended the path from health to chronic invalidism; from hope to misery. We have met with the individual who in the beginning of a tuberculous infection has frittered away his time and opportunity for recovery by indulging in such seductive traitors as peruna, "soothing syrups," liquozone, etc., to the exclusion of measures that might reclaim him. Here first appears the appalling nature of the crime. Or, take the strong, healthy young man, on the threshhold of a business career, poor in purse, but rich in ambition and potentiality. He reads the advertisement of one of the picture-gallery quacks. He is impressed with the the intimate relation, as they claim, between night emissions and "lost manhood." He is not aware that it is health and strength that pave the way to night emissions, in the absence of normal intercourse; that they are a provision of nature to take care of an overstocked organism under just such circumstances. He accepts the false dictum of the quack—how is he to deny it, knowing nothing of the

subject?—consults him, and then he has a hard time getting out of his clutches. He immediately becomes a subject of "lost manhood," "varicocele" or other diseases of which he knows nothing, and is supplied with a symptom to fit all of his imaginings, as well as the wordy pharses of his quack consultant.

"Who steals my purse steals trash;
But he that filches from me my good name
Robs me of that which not enriches him,
And leaves me poor, indeed!"

Who robs the youth of his ambition, his hopefulness, his trust in the future, robs him of his all. And the scheming, heartless charlatan does this, if he can. He enmeshes him as far in the toils of his net as he is able, fairly feeding him on the bugbears of "spermatorrhea," "youthful indiscretions," etc., and incidentally draining him of as much of his weekly earnings as he is able.

I have been consulted by a number of young men, in the past several years, who had been convinced by such means that they were sufferers from such disorders; had been undergoing so-called treatment for varying lengths of time (always for as long as they could be held in the traces), when *in fact they had not been diseased at any time*, but had been healthy and sound. The misery and mental suffering they had experienced had been absolutely unnecessary, foisted on them with fiendish ability and criminal premeditation. Such action is a crime, pure and simple, and of the basest sort; and if the public understood the conditions well, I believe it would be listed in the category of penitentiary offenses.

The refinement of knavery of this kind is shown in an advertisement that appears regularly in most of the leading publications of the country, as follows:

"TEST YOUR KIDNEYS: Let some morning urine stand for twenty-four hours in a glass or bottle. If then it is milky or cloudy or contains a reddish brick sediment, or if particles or germs float about in it, *your kidneys are diseased.*" No loophole of escape is left the credulous reader: for the specimen of urine that after twenty-four hours will not show some of the characteristics named, does not exist. The decomposition and sedimentation incident to perfectly normal urines is thus seized upon and by absolutely devilish intent and malicious misrepresentation, made to do duty as an indication of disease of the kidneys—Bright's disease. Many impressionable people are imposed upon in this way, receiving the seeds of melancholy that in certain instances cannot be removed by the best of counsel. For instance, in the same issue that contained the above quoted advertisement, the following news item also appeared: "Suicide Due to Causeless Fear. Andrew J. Teggin, an artist whose pictures have been exhibited at the Academy of Design, took chloroform today and died at the New York Hospital. Teggin's death was the result of five years' dread of Bright's disease. Although many eminent specialists had assured him he had no symptoms of the disease, he persisted in believing that he was doomed to die from it, and this so worked on his mind that he killed himself rather than wait for the end he felt sure would come."

It is astonishing to what limits these fakers go in laying their ridiculous claims before the people. One bold individual proclaims that, without the use of the knife, ligatures or operation, he cures with marvelous celerity, varicocele, stricture, loss of manly vigor, contagious blood poison, ulcers, skin diseases, kidney, bladder, and prostatic diseases, piles, rupture and hydrocele, and all private diseases. In fact, all unnatural discharges "are stopped in twenty-four hours." He cures stricture by applications which dissolve it completely, etc. A patient who consulted Dr. T. A. Hopkins of our city, after he had had his strictures "dissolved out" after this fashion, was found to be in the most deplorable condition imaginable. His urethra from end to end was a mass of scar tissue closed tight against the passage through it of urine; false passages and infiltrations of urine preceded numerous abscesses, septicemia and involvement of the peritoneum, diffuse peritonitis; death shortly afterwards relieved his sufferings, notwithstanding the best efforts of several surgeons who were in counsel on the case.

Here was a man who had been irretrievably damaged by a so-called process of treatment that is known to be not only futile for accomplishing favorable results, but necessarily injurious to any tissues that it could "dissolve out."

In another regular advertisement, the Fulton Company explains that Bright's disease and diabetes, heretofore incurable, are now curable in 87 per cent. of all cases by Fulton's compounds. The symptomatology for determining the diagnosis of these two diseases is made broad enough in the advertisement to spare no one who examines his urine according to the directions given. The principle of "let no guilty man escape" is utilized to the fullest capacity in such trick-writings.

The public, of course, knows or understands little of such conditions, but stands ever ready to listen to and absorb these self-laudatory perorations. Those who are least able to afford it—the poor and ignorant—are the ones most persistently and successfully preyed upon.

We have, then, the indisputable evidence that these evils exist; and when we consider them squarely, we realize that they are not inconsiderable, whether weighed in the light of pecuniary or other relationship. The next point for consideration is how best to eradicate them.

Under such circumstances it is the usual habit of the people to resort to legislative enactment. Paternalism in the government is usually vociferously advocated by the fellow who wants to regulate his neighbor in some respect, but he deprecates it strongly enough when he thinks his neighbor wants to regulate *him* by it.

But, while legislation should play a part in such regulations, it is questionable how far it it may be made to reach. For instance, since beginning the preparation of this address, my friend, Dr. Scherck, has called my attention to the existence in the Municipal Code of St. Louis, of the following ordinance, apparently bearing distinctly and heavily on the evils under discussion; and others, not necessary to quote here, refer as definitely to the circulation of hand

bills on similar topics. And yet I have not been able to find record of their having been put to the test of constitutional regularity, although they have been in the code since 1883.

SECTION 1447.—*Obscene Newspaper Advertising Prohibited.*—Any person who shall in the city of St. Louis advertise or cause to be advertised in any newspaper printed or circulated in said city, or shall print or publish any advertisement or notice in any newspaper printed or circulated as aforesaid, purporting to give information as to the treatment of venereal or private or womb diseases, or impotency, self-abuse, sterility or any disease pertaining to the genital organs, or purporting to give information from whom or where medical treatment or medicine may be procured in the above mentioned cases, or any of them, shall be guilty of a misdemeanor, and upon conviction, shall be fined not less than fifty nor more than five hundred dollars for each and every offense. (R. O. 1892, sec. 988.)

At the most, legislative enactment is a roundabout way to correct such evils that concern the people so broadly and yet so intimately. This evil is chiefly a matter of "fooling all of the people all of the time." If we can show the people the facts; if we can educate them to an appreciation of the degree of their gullibility, that will help some; but I believe it will prove a difficult part of the task. Because, as P. T. Barnum said long ago, "the American public likes to be humbugged." And the patent medicine habit has become a fixed one with a large proportion of the people; they are never happy unless they are miserable—and taking something for it. But education has worked other revolutions, and we should not despair until this remedy has been applied.

There is a widely-disseminated and growing belief, now, that matters pertaining to sexual physiology and pathology should be taught in a simple way to the budding youth of both sexes, in the course of their regular education in order to place them in position to resist the temptations that beset young life, by the clearer understanding that such instruction would afford. The errors of youth are *because* of youth, mainly, and are not only laid aside, but are even forgotten, when the mental majority is reached. Such instruction might well be amplified with warnings on the topics now under consideration. Lectures are given on the anatomy and physiology of the heart, lungs, liver, etc., in academies and other general educational institutions, but the instruction that would be of far more practical benefit to the auditors is carefully withheld, totally ignored. On these subjects they are left to find out what they can as best they can; and it is usually the *worst* that they can, through sources and channels the most depraved. Nothing can be in favor of this system—if system it can be called. It means simply the abandonment of youth to its own resources, and you know what they are. As the boy said, who was desired to write an essay on Nero, "The less said about Nero, the better."

Instead of attacking these evils negatively, as is done at the present time, by ignoring them, let us attack them actively. Let us make use of

educational channels of all sorts to spread the information, in a scientific, dignified, truthful and wholesome manner, and such instruction will be received in the spirit in which it is imparted. When properly presented, youth is entirely capable of considering these matters intelligently and judiciously; and it is only just that it be given the opportunity to consider them in the light of truth and knowledge, bestowed with the guiding hand of experience.

But not the least important work for eliminating the villainies of quack advertising must relate to the publications themselves. If it could be made generally unfashionable for respectable publications to carry such advertisements, the field for them would be narrowed, indeed. That is, however, in process of accomplishment at the present moment. A number of publications have already taken that stand. *Collier's Weekly* is foremost in the fight—for fight it is, and in earnest. In several of its issues during the past summer and fall it has not only portrayed the horrors of the patent medicine and quack advertising scourge, but has not been lenient in taking the newspapers themselves to task for their hypocritical and pusillanimous conduct. Under the title, "Criminal Newspaper Alliances with Fraud and Poison" (*Collier's*, July 8, 1905), Norman Hapgood lays on with no uncertain stroke; and later, under the heading, "Murdered by Advertisement," it has this to say: "Patent medicine horrors have never reached a point of deeper degradation than in the yellow fever troubles of the South. Mr. Samuel H. Adams, whose series of articles will begin in five or six weeks, will hardly have anything more startling to narrate than the incredible performance of 'Peruna' in alliance with the New Orleans *Times-Democrat*. This sheet has accomplished a feat of prostitution which, considering its pretence to respectability, probably sets the record. While the South is struggling to check a peril of the direst magnitude, this newspaper publishes an 'interview' with 'Dr. Hartman,' with the familiar allegation that he 'said in part,' and all other devices, to make it look like an important piece of news. Its headlines are: 'How to Avoid Yellow Peril—An Interview With Dr. Hartman Concerning the Yellow Plague.' To the reader this is the genuine opinion of a physician. He cannot know 'Dr. Hartman' is the head of the 'Peruna' Company, and that the *Times-Democrat*, in whom the reader presumably has some trust, is selling itself and the safety of its constituents for a bag of gold. 'A summary of this interview,' the *Times-Democrat* informs us, 'is being spread broadcast over the United States for the benefit of yellow fever sufferers.' The gist of it is that, while screens and other precautions are advisable, peruna should be taken at once, and continued during the whole course of the epidemic. For anybody who believes we have taken too seriously the patent medicine evil and newspaper complicity therein, this unspeakable outrage should be a lesson. Is there anything to which men cannot be led by money? To own a newspaper and hire it out to perilous fraud in an

emergency like the yellow fever danger, almost surpasses one's belief in human greed."

Several issues of the *Ladies' Home Journal* have presented striking object-lessons in the fraudulent character of patent medicine advertisements; some of them I have already alluded to. Needless to say, it refuses to pander to such fraudulent business. The *Boston Herald* assures me, in a personal note of recent date, that while it does not exclude all medical advertising, it does exclude such as cannot be read before children, which cuts out from its circulation the swarms of venereal "specialists," with their varicoceles and other buga-boos. The *Minneapolis Journal* has declared for the same policy, saying that it will keep its columns free of *offensive* medical advertising at least. The *Emporia* (Kansas) *Gazette* has also joined the ranks of the respectable in this matter and the *Marine Telegram*, Marine, Illinois, and the *Vernon Weekly Hornet*, Vernon, Texas, refuse to accept quack advertisements. A tendency in the same direction, indicated by expressions of commendation of *Collier's* course, is manifested by the following: *Brooklyn Eagle*, Brooklyn, N. Y.; Ortonville, Minnesota *Journal;* Lowell, Massachusetts, *Sun;* Menominee, Wisconsin, *Times*. A survey of the better class of monthly magazines discloses a very small proportion of their space, if any, devoted to charlatanism. Among them the death-knell of the quack advertiser has already been sounded; and it is a fact that he now luxuriates only in the daily newspapers and the magazines of the lower order. It is not unlikely that this distinction will become more evident as time passes, and fuller knowledge of the wiles of the charlatan is disseminated. The wheat will be sifted from the chaff in literature, and the journals that continue to patronize and advertise such frauds will be stamped as "yellow" and dishonest, whether any legislation ever steps in to control the situation or not. But it is primarily to the education of the people to which we must look for providing either the required legislation, or the belated impulse for self-respect and decency on the part of the newspapers.

At the twenty-first annual meeting of the Mississippi Valley Medical Association held in Indianapolis, October 10, 1905, the following preamble and resolution were unanimously adopted by the surgical section:

WHEREAS, The medical profession keenly realizes the great and increasing public evil, moral, mental and physical, arising out of the support given by the public press to the so-called patent medicine interests, leading to the pernicious practices of self-drugging, narcotic habituation, and alcoholic excess; be it

Resolved, That the Mississippi Valley Medical Association commends and frankly endorses the attitude adopted by *Collier's Weekly* and the *Ladies' Home Journal* in giving publicity in the articles by Samuel Hopkins Adams, Norman Hapgood and Edward Bok, respectively, to the truthful exposure of the nefarious practices and unscrupulous methods of the so-called patent medicine concerns.

PART II.

On the Prophylaxis of the So-called Venereal Diseases.—Another subject which I believe to be well worthy the attention of our Association is the determination of practical methods of protecting our people—and more especially the youthful part of our people—from the far-reaching and diastrous effects of those diseases generally termed venereal, but which are not uncommonly entirely innocent in their development; I refer to gonorrhea, syphilis and chancroid.

When contagious diseases like smallpox, yellow fever, scarlatina, etc., prevail in a community, there is united effort on the part of authorities and people to limit their spread and stamp them out by means of keeping track of every case, and the adoption of various sanitary regulations. Expense is not spared to accomplish the object by whatever means possible.

But no such endeavor appears with reference to the vastly more widespread and more injurious contagious diseases mentioned. Like the ostrich of the desert, the authorities and the public bury their heads in the sand and ignore the whole subject. They want no identification of such infected (and therefore dangerous) individuals; they desire no statistics on the subject, and aim at no means whatever to secure to the healthy part of the public immunity from contamination at the hands of the unhealthy. And yet these diseases prevail to an extent undreamed of by the people and those in control of the public health of our country.

Prevalence of Syphilis and Gonorrhea.—Those who make a comprehensive study of these matters say that syphilis is the most important, from whatever standpoint considered, of any disease extant. It is, of course, difficult to arrive at an accurate estimate of the prevalence of these diseases, but by the best posted investigators it is claimed that in Paris one-seventh of the whole population is syphilitic; one-twelfth of Berlin's population are similarly affected, making about 150,000; one-fifteenth of New York's, or 225,000. Probably the other large cities of this country will furnish a similar proportion, the whole meaning an appalling number; all contagiously diseased and associating as they please, without restriction, among the people whom they contaminate *ad libitum* as time passes and opportunity offers. A conservative estimate will place the number thus affected in this country at upwards of two and a half millions.

While, then, the percentage of syphilitics among the urban populations of the present day is reckoned at from seven to fifteen, and this makes a startling announcement when we face it squarely, what must we think when it is declared that gonorrhea, which is now looked upon as being much more destructive to life and in certain respects more serious than syphilis, is prevalent in much greater proportion, still? That many students of venereology claim that of the male part of our population fully *ninety per cent.* have been affected with gonorrhea at some time in their lives! Further, while it may seem an anachronism to attribute a large share of gonorrheal infection to the virtuous wives of our country—the noble women who are "behind the throne" in this

wonderful country of ours—we must listen when a man of Prince A. Morrow's standing and knowledge of the subject makes the following statement: "It may be a startling statement, but nevertheless true, that there is more venereal infection among virtuous wives than among professional prostitutes in this country. Noeggerath stated that of every thousand men married in New York, eight hundred had latent gonorrhea, from which their wives became affected. Admit that this is an exaggeration—a gross exaggeration—say eight per cent. instead of eighty per cent.; of the sixteen million married women in this country, eight per cent. would give one and a quarter million infected with gonorrhea alone."

These statements refer to the adult population, only; in a recent discussion of this subject in New York, Dr. La Fetra called attention to the prevalence of gonorrhea and syphilis among children, approximately all of whom, it may be remarked, acquired the diseases innocently. At the Vanderbilt clinic, where about 3,000 new patients were seen yearly, from six to ten per cent. were syphilitic patients, while from one to two per cent. suffered from gonorrheal infection, exclusive of infection of the eye. It had been found necessary to establish a special section in the clinic for the treatment of gonorrheal vaginitis in children."

Gonorrhœa and its complications are, in fact, much more frequent and common than appears on the surface, or even on a casual investigation of the subject, and for well-founded reasons. It is present in an enormous number of persons who are not aware that they have it; who believe that they have never had it since the discharge stopped some months or years previously. In such cases it is as insidious as it is persistent, and the accusation that they still have it is indignantly denied. On the other hand, motives of pride, shame, secrecy all impel the individual to hide his infection when he has it, or to deny it even if it is demonstrated that he still suffers from a lingering remnant of the infection. Also the fact that recurrences of outbreaks of an old infection of this kind are commonly interpreted by practitioners as "nothing but a strain," etc., restricts the recognition of the prevalence of this infection in its true light.

Prevalence of So-called Venereal Diseases of Non-venereal Origin.—While this, also, is a matter difficult of determination, it is well established that the so-called venereal diseases affect human kind to a very large degree through *accidental and wholly innocent agencies.* It is asserted by those in the best position to know, that 10 per cent. of men who have syphilis acquire it in a blameless manner; while of the women thus affected, from 25 to 50 per cent. are infected through no fault of their own. Of married women, some authors give as high as 85 per cent. innocently infected.

It is well established, for instance, that because of certain domestic habits or customs, whole communities in some countries are affected with syphilis, practically all of them having acquired it without any immoral relationship.

Like pale death, it knocks with equal fate at cottage door and palace

gate. Moreover, it is no respecter of age; the child, the adult, the aged are alike the subject of its fell attack, and without the ignominy of "venereal" being attached to the mode of obtaining it.

Why Syphilis is so Frequently Non-Venereal in Origin.—Even a rudimentary knowledge of the nature and characteristics of the disease explains why syphilis is so frequently non-venereal in its mode of transmission. It is a constitutional disease and affects the whole body of the individual, thus affording a large area for the presentation of the lesions of the disease, which may appear at any point on the body, or at or within any of the outlets of the body, the mouth, nose, anus, etc. All of these lesions may give rise to the secretion of material that is contagious, capable of conveying the disease on being applied to an exposed point on the body of a healthy person. Moreover, the time during which this disease is actively contagious is much longer than for other contagious diseases. It extends over several years (two or three, at least; sometimes longer), instead of several weeks, as with scarlet fever, etc. Here, then, is a person, for two or three years' time, subject to repeated outbreaks of the disease, the secretion from any lesion of which is poisonous to healthy persons—whether it comes from skin eruptions, mucous patches of the mouth, lips, tongue, cheeks, gums, tonsils, throat, nose, eyes, ears, face, scalp, hands, fingers, toes, body or limbs. Consequently we find chancres (the first lesion of syphilis) located, in different cases, at all of these points. And when they occur at points other than the genitals the origin is usually non-venereal.

Such innocently acquired chancres were formerly supposed to be rare, but further observation has shown that to be far from the case. Fournier, for instance, one of the world's greatest syphilographers, says that for years he overlooked chancres of the tonsil altogether, and yet latterly Krefting alone reports fifty-eight such cases in his own practice. Chancres located at this point (tonsil), instead of being derived from venereal contact, are much more commonly the result of domestic practices which transfer the contagion by means of eating utensils, or by that simple but necessary process of wet-nursing, with the following sequence of events: An unfortunate or a dissolute husband brings syphilis into the family, infecting his wife and the child she bears him. For some reason the mother is unable to nurse the child, and a wet-nurse is employed. The syphilitic child nursing at the tender breast of the healthy woman soon inoculates it, and a chancre develops there, followed by systemic syphilis, as complete and far-reaching as that acquired by sexual contact. If the woman thus infected is ignorant of the conditions prevailing, or is careless, she further spreads the disease by suckling healthy infants, who in turn are capable of conveying it to their healthy parents. A very considerable number of epidemics started in this manner and involving many innocent persons, are on record. Bulkley (Syphilis in the Innocent, 1894) tabulates no less than twenty-four such epidemics, infecting many

hundreds of persons. The old fashion of cupping used to be a prolific source of spreading this disease innocently; twelve such epidemics are recorded in the tables of Bulkley (ibid). Other modes of starting and disseminating the disease wholesale are well known, such as by vaccination, tattooing, glass-blowing, eustachian catheterization, parturition; and various domestic employments that bring about intimate relationships between people, one of whom becomes infected and does not exercise the necessary precautions to prevent contagion.

Montgomery (*California Medical Bulletin*, July, 1905) describes a custom that obtains in certain parts of Russia that leads to the indiscriminate transference of syphilis, the chancre appearing in most such cases in the mouth or on the tonsil. At meal time a large dish of thick porridge is placed between two eaters, who dip in with a large spoon. Such spoons are never washed, but are licked off and stuck into a hole in the wall to dry for the next meal. By this and other similar means the disease is spread so widely and without genital contact that no shame is attached to having it.

Before the cow was used as a medium for the cultivation of vaccine virus, many small epidemics of syphilis occurred in communities through the contamination of the virus by some syphilitic person on whom it was cultivated. Also, the custom formerly in use by surgeons, of using one knife-blade for making a series of vaccinations, was followed by disastrous results. One person in the series being syphilitic contaminated the knife, and most of the remainder received syphilitic as well as vaccine virus.

But, as you know, an understanding of the unfortunate results of such customs has led to their abolishment. One now never hears of a case of vaccine-syphilis, which in itself is an object-lesson on the benefits derived from scientific study of these matters and the dissemination of knowledge concerning them.

These remarks refer to *epidemics* of the disease; individually it is many, many times conveyed in the most legitimate—nay, unavoidable—manner. I am personally acquainted with a number of physicians who have been inoculated on the finger while making examinations of patients or operating on them. They have thus sacrificed themselves on the altar of duty to a degree not known by the public, but fully and lastingly realized by themselves. It is practically impossible for a surgeon to avoid the risk of contamination. In city hospital service I have on a number of occasions seen surgeons work without hesitation in desperate cases of surgical injury, while the patient was in the full bloom of secondary syphilis, every drop of his spurting blood endowed with syphilitic virus, enough to poison a multitude.

Many other vocations have this danger as an appanage. The professional nurse constantly runs the risk of being inoculated by the soiled dressings of an unrecognized syphilitic individual; the policeman, in contending with an obstreperous roisterer, is poisoned by a bite or a scratch in which some syphilitic saliva is deposited; I have seen cases in which prizefight-

ers had conveyed it from one to another in a similar manner.

Why Gonorrhea is Frequently a Non-Venereal Disease.—In the form in which gonorrhea is most dangerous to the community, from the standpoint of contagiousness, it is not the outspoken disease that makes its presence easily evident; on the contrary, it is obscure, insidious, persistent, in thousands of instances failing to make itself evident even to the bearer himself, though it is none the less fatal in its contagiousness. Indeed, it is just these quiescent, so-called latent, cases that conduce to the spread of the disease. A person with an active gonorrheal discharge is, on that very account, little liable to seek intercourse. He is forewarned of the danger of the act by the discharge itself. But the person who has been "nearly cured" of the trouble, so that, while there is no external discharge, there is yet a continuation of the infection in inaccessible parts of the urinary or genital tract—he is the one who presents the ideal conditions for spreading the contagion, either in promiscuous or domestic sexual relations. It is the bridegroom thus unconsciously affected who conveys the disease to his innocent and trusting spouse; who involuntarily endows her with more ills and a greater marital handicap than she can recover from in a generation.

The gynecologists are the ones who see the exposure of this subject in its horrifying aspects. The heartrending details they give us, of non-venereal gonorrhea in women, are hardly credible; and, while the medical profession is becoming convinced of their truth, they are hardly listened to by the public, who do not wish to hear about such disagreeable things.

Gonorrhea is a true "venereal" disease, arising through illegitimate sexual contact—among children in something like 2 or 3 percent. of cases; among married women, in 15 percent.; among unmarried women, 90 per cent.; among men, about the same.

The Damaging Effects of the So-called Venereal Diseases.—We have alluded to the vast prevalence of these diseases among the peoples of the world; we have had an inkling of the extent to which they exist as non-venereal diseases, together with the reasons therefor; now let us take a glimpse—merely a glimpse—at the manner and extent to which they damage the people, and see whether it is not time that the medical profession is sounding an alarm that the people cannot escape.

If we proceeded to an ample rehearsal of the ill-effects of these diseases we should have to occupy the balance of the session for that alone; but we should find that, besides their direct attacks on the physical organism of the people, their influence is felt in practically all the relations of life—domestic, commercial, religious, political, forensic, hygienic, mortuary, and above all, in relation to the preservation and propagation of the species and the fecundity of nations.

They have a dominating influence on births, on life-processes, on death —and afterwards; for, verily, the sins of the father are visited on the sons for the second and third generation.

If authorities would hearken and learn the bearing of two diseases

alone—syphilis and gonorrhea—on the reproductive faculty, they would have to seek no further for an explanation of that much-talked-of "race suicide." As a death-dealing agency toward unborn children, syphilis has no equal. It causes 42 per cent. of all abortions and miscarriages. Of unborn children endowed with hereditary syphilis, from 70 to 86 per cent. die either before the natural term of development or shortly after birth; and if they do not then die of the disease, they are usually stamped with its effects in a way that is never obliterated throughout the life of the poor, stunted, weazen-faced sufferer. In France alone hereditary syphilis kills 20,000 children yearly, which is 7½ per cent. of the total mortality from all causes for the year.

If there is needed any further reason to explain the receding birth-rate of France, it is furnished by the companion-piece of this affection—gonorrhea. While syphilis has this astounding influence in aborting pregnancies and cutting short the life processes of nature, it does not begin to equal the malign effects of gonorrhea and its sequelæ in *preventing conception*. It is reckoned that more than 50 per cent. of women who have ever become infected with gonorrhea remain sterile the balance of their lives (some authors give even a higher percentage than this); while to gonorrhea in men is due 20 per cent. of all childless marriages that are involuntary.

In a recent paper, read by Dr. Morrow before the New York State Medical Association (*American Journal of Dermatology and Genito-Urinary Diseases*, August, 1905), the author thus recounts some of the items in the pathological balance-sheet of venereal infection: "Syphilis is the cause, direct or indirect, of fully one-eighth of all diseases which afflict humanity. . . . Leaving out of consideration the superficial secondary accidents, and taking only lesions which may involve or compromise the integrity of important organs, we may place to the debit side of syphilis 90 per cent. of all cases of locomortor ataxia, more than 75 per cent. of all ocular paralyses, a considerable percentage of iritis, choroiditis and retinitis; a large proportion of general paralysis, paraplegia and hemiplegia; 80 per cent. of all cases of paresis; every hemiplegia occurring in men under forty years of age, not addicted to liquor, is of syphilitic origin.

"The pathological liabilities of gonococcus infection are scarcely less formidable. Passing by the local inflammations, the articular and systemic complications in the male, gonorrhea in the female causes 80 per cent. of all deaths from inflammatory diseases peculiar to women; practically all the pus tubes; more than 75 per cent. of all the suppurative pelvic inflammations, and 50 per cent. of all gynecological operations performed by surgeons, to say nothing of a large number of women who drag out a miserable existence of invalidism."

While gonorrhea is not hereditary like syphilis, into the second and third generations, it does enough execution in one generation to make up for any shortcoming in that regard; and, besides, the stigmata of the disease are not lacking in children born of gonorrheic women. They commonly receive gonorrheal inflammation of the

eyes, to which 80 per cent. of blindness of the new born is due, while 20 per cent. of the blindness from all causes is a result of gonorrhea.

On the Measures for Prophylaxis of the So-called Venereal Diseases.—Such, then, are these contagious diseases, ignored by the public, neglected by state and authorities, accepted and concealed by society, tabooed by the press, save in their nauseous advertisements of fake remedies and worse doctors; decried and loaded down under the d e s i g n a t i o n, "venereal," until one hardly dares mention them even in a medical society, because of the habitual odium attached to them.

Is it sensible, is it manly, is it humane, is it *right* to refrain thus from promulgating facts and figures that mean so much to humanity; of which so much practical use could be made if they were well understood? Shall we, custodians of this knowledge, idly wait for the awakening of the people to the realization of their error? Shall we hold the tastes and habits of society so sacred that we tremble lest we disturb its serenity? Lest, by saying unpleasant things we cast a ripple over the surface of the foul pool? Away with such complaisance and such fears! Let us tell the truth and shame the devil!

The question presented for our conning, then, is how best to make the attack? How best to gain the attention of those most concerned—the people—and get them to act for their own good?

I believe nothing is to be accomplished by prolonging the discussion of that much-mooted question as to the propriety of legal control and regulation of prostitution. Aside from the approximate failure with which this plan has met on the Continent, where it has been in use under the most favoring conditions of governmental sanction and professional assistance, it is inexpedient to try it in this country, and we should apply our energies to more promising fields of work. Instead of trying to do what is, prima facie, impossible—to corrall and disinfect *all prostitutes*—let us rather teach the public the dangers of prostitution, the dangers of the diseases to which it leads, the prevalence of such diseases in daily life, and how they are acquired innocently, and how they are to be avoided, and the necessity of seeking relief from them as soon as possible when they are acquired.

The campaign of education must be our chief reliance, and the medical profession, followed by the ministry, instructors in institutions of learning in general, philanthropists and leaders in public work, will have to be counted on as the purveyors of such education.

The youth of both sexes should be given instruction regarding these matters. I know the same old habit of ostrich-like reticence predominates here, and it is considered "not nice" to converse with youth on such subjects, on the ground that it might direct its trend of thought into a channel not desirable. As if youth does not think of such things on its own account, and discuss them, too, and mainly in the most unfortunate and harmful way, morbid curiosity prevailing and leading to practices and experi-

ments that prove disastrous, regrets and melancholy that comport but illy with that time of life.

In a talk with the students of the University of Pennsylvania, on a similar topic, Dr. R. N. Willson of Philadelphia, related the case of a country boy who came there as a student the previous year. He was induced by friends to visit a house of ill-fame, where he was infected with gonorrhea; shortly afterwards, when he noticed that his eyes were smarting, he was advised by one of his friends to bathe his eyes with his own urine. He did this; gonorrheal inflammation developed in both eyes as a result, and to-day the country boy is blind—and will be so the balance of his lifetime.

While ignorance alone did not lead this young man into temptation, since others less ignorant than he have succumbed to that temptation, it is a certainty that had he been correctly informed about the infectiousness of gonorrhea he would never have committed the fatal error of bringing his infected urine into contact with his eyes.

A school-boy friend of my own, returning from college to spend the Christmas holidays at home, was led by his friends into a similar ambush. In one night of indiscretion he was infected with gonorrhea, chancroids, and syphilis. A round of pleasure produced a penance of years; and at a time when he was least able to meet or carry out the requirements for recovery. The handicap of trying to give himself the necessary medicinal and other attentions, of maintaining concealment of his misfortune, of meeting the expenses required, and of keeping up in his studies, was too much for him; he retired from his college in less than a year a physical wreck and a blighted individual. Had this boy known the fearful dangers he was running in going with his friends he would have at least been in better position to withstand the temptation presented. "Had I only known in time!" is an oft-repeated cry heard by the medical fraternity.

Morrow says: "The public does not know that the immense majority of such infections occur in the young, the inexperienced, and the irresponsible, through ignorance and lack of moral training. Seventy-five per cent. of all infections among public women occur before the twentieth year; and twenty-five per cent. of all infections in males occur before the twenty-first year. This is the age when the centers of arrest, judgment, reflection and will are not developed; an age when the individual is influenced by impulse, imagination and curiosity, before those maturer faculties of inhibition are developed."

What valid objection can there be to imparting such information to youth? Why keep that from the developing young boy that will help to fortify him against unavoidable risks and temptations of life?—leaving him in ignorance on matters that are imperious in their demands on his attention, that are natural to him; that, indeed, are the outcome of one of the first laws of nature, the reproduction of the species?

Why attempt to keep him in ignorance when you know that he will learn of such things some day; and if not properly taught him they will be learned through the most unfortunate

sources—from other boys as ignorant as himself, but perhaps possessed of a greater stock of misinformation. Which of two sources of instruction would be the better for the boy, the one in which distortions of truth and riots of indecency play the part, or the other in which in intimate and friendly conference his father or his family physician, the revered nestor of the family, explains nature's phenomena and her dangers, in a candid, dignified manner, free from sensationalism and pudicity?

There can be no question about it. Boys and young men are capable of considering these subjects seriously and judiciously if presented to them properly. If the veil of mystery and ignorance is drawn over them, that does not deter youth from making its own investigations, usually by reading quack newspaper advertisements and "marriage guides," or even by conferring with that fountain-head of venery, the harlot herself.

If, then, ignorance plays such a large part in the original dissemination of such affections, the natural corollary is that enlightenment should be a material factor in limiting them and conserving the health-interests of especially this portion of our citizenship.

I have for a number of years been convinced of the correctness of this stand. I have had a number of personal conferences with boys, sent to me for the purpose by their parents, and have in no instance found cause for regretting the step. They have appreciated the explanations made, have asked questions intelligently, and have profited materially by the conferences. Moreover, if, notwithstanding the warnings given, their curiosity has led them into trouble, they have at least been in position to act intelligently by going promptly to regular medical practitioners for treatment, rather than accept the questionable, if "free" service of quacks or even of druggist friends.

On two occasions in St. Louis I have, by invitation, delivered lectures on the simpler aspects of anatomy, physiology, and diseases of the genito-urinary system, before audiences of pharmacy students. From their comments I have felt that the effort was not altogether misplaced or unappreciated, and that that form of criminal meddling called "counter-prescribing" for such maladies would be less practiced by those present, who thus learned the fallacy and total inadequacy of such a plan.

These experiences, together with reasoning by analogy, have made me the more convinced of the propriety and advisability of inaugurating some regular method of teaching the youth of both sexes the rudiments of their natures, and what else is found to be desirable on maturer consideration and tentative application of the belief. If it be objected that the school period of life is too early to begin the teaching, it must be remembered that this is the very period in which the greatest proportion of unfortunate mishaps occurs, not alone with regard to venereal infections, but with regard to unfortunate habits and practices into which children lapse before they are taught the dangers. Of illegitimate pregnancies among girls, it is probable that nine-tenths are brought about through ignorance of the se-

quences of dallying with friends of the opposite sex. Anatomy and physiology of the heart, the lungs and muscles are assiduously taught them in schools, but the subjects that would be of most practical benefit to them are as carefully kept out of the curriculum, leaving the young woman to save herself by her own intuition and self-respect. And if, in the difficult conditions of the present day, she pass unscathed through the vicissitudes of this period of her life, she has yet to go untaught through the awesome experiences of married life. If, after that, she does not suffer from the effects of ignorance on the part of her husband—from an unrecognized or uncured gonorrhea or a veiled syphilis—she may be considered fortunate indeed.

If it be considered advisable to provide such systematic instruction for the youth of our communities, shall we withhold the benefits of similar instruction from those who have passed the age of school life, the working classes of both sexes, for instance? Young men's and young women's Christian associations, and other similar organized bodies, are rapidly acquiring the habit of receiving regular instruction in useful arts and employments in night lectures given by philanthropic citizens. Is there reason why they should not receive sensible instruction on these topics? Assuredly not. Organize your teaching forces and you will meet no lack of interested auditors, eager to obtain at first hand a correct interpretation of the laws that govern their sexual make-up.

That this movement of prevention and reclamation is accumulating and assuming definite shape, is shown by the numerous writings on the subject, in various parts of the country, by members of the medical profession—writings that of late have been more practical in their suggestions for a solution of the difficulties encountered, and less theoretical in their prolonged discussion of the propriety of regulating prostitution, etc.; but more especially is the definite progress indicated by the history of recently organized societies, formed for the purpose of studying and promulgating methods for the prevention of these diseases. The American Medical Association has taken up the subject systematically, and has delegated an able committee to carry on the work of collective investigation and to report at the annual meetings. Two international congresses for the prophylaxis of venereal diseases, in which every civilized country in the world was represented, have been held in Brussels. From these was evolved the plan to form, in different countries, societies of sanitary and moral prophylaxis, to study and put into effect the best means of every kind—moral, legislative, social, as well as medical—to be adopted for the prevention of these diseases. Such societies have already been organized in many of the countries of Europe (France, Germany, Italy, Holland, Spain and others); that of Germany possesses a membership of nearly four thousand, with twenty different branches; while in France it has nearly one thousand members. Within the present year, under the inspiration of Dr. Prince A. Morrow, the

American Society of Sanitary and Moral Prophylaxis has been organized in the East, has had two enthusiastic meetings, and has drawn into its membership not only prominent members of the medical profession, but the clergy and the legal fraternity have shown their desire to further the movement by becoming members and by their active participation in the work of the sessions. I recently received a note from Dr. Morrow, in which he says: "I am sending you under separate cover a pamphlet issued by the American Society of Sanitary and Moral Prophylaxis, and one or two other papers, which will give you an idea of what we are attempting to do. We have begun the work along educational lines, taking up first the instruction of the youth of this country, as you will see from the program in the back of the pamphlet.

We desire to have branch organizations in all the states. Such societies are now being formed in at least two of the western states, and, as I understand, in Massachusetts. The movement is gaining in interest and, I trust, in strength throughout the country. I hope that you will be able to help us."

This society has already held two successful meetings, and another meeting is scheduled for the present month (October), at which questions of the propriety, the nature and the scope of instruction on sexual physiology and hygiene are to be taken up.

Away with prudery; meet the enemy openly and fearlessly, the enemy that is sapping the very life-blood of our noble nation, and doing it because we are shame-faced and hesitant in our fight against it!

DISCUSSION.

Dr. Blair: Among the other papers in line on this advertising scheme was the *Woman's Magazine.* Mr. Lewis told Dr. Blair that he had excluded from his magazine "any medical advertisement referring to treatment below the waist line." Dr. McCormick told him that in Louisville objectionable medical advertisements (and this included patent medicines) had been excluded from at least one of the papers there by a simple explanation to the editor of what these things were. He had been impressed by the statement of Dr. W. J. Mayo, that the main fault of all quack practice of medicine lay with the regular practitioner, in the fact that they had not heretofore acknowledged to their patients that the majority of ailments for which patients call upon the doctor were self-limiting, and at least improved of themselves. This lack of frankness on the part of physicians had made an opening for the vast army of irregulars to do the same thing.

Dr. Joseph Grindon thought it was a most timely paper. There seemed at last to be an awakening of the public to the great evil of the use of "patent" medicines. Most of the members would remember J. Cresap McCoy. He had advertised largely, especially in the Sunday papers, publishing pictures of patients he had "cured," together with testimonial letters. At that time Dr. Grindon was one of Dr. W. C. Glasgow's assistants at the old polyclinic. An old German who had atrophic catarrh used to visit the clinic to have his nose washed out. He had absented himself for some weeks when there appeared in a daily paper a picture of

this patient and a letter stating that he had suffered many years with catarrh, had been treated by many prominent specialists in St. Louis without avail, and that Dr. McCoy had cured him. A week or two later he turned up at the clinic as usual. When asked why he had given the testimonial, he replied that his daughter had been trying for years to get him to have his picture taken, and that Dr. McCoy had offered to give him eleven pictures out of a dozen if he would sign a testimonial. Again, a superintendent of a street-car barn learned that acetanilid would relieve some headaches, so he put up some powders and gave them the name "nu-nervo," doubtless as good a name as any of the others under which acetanilid masquerades. One evening this man met a friend whose wife was subject to headaches, and gave him some powders in an envelope bearing the statement that they were perfectly harmless. The next morning there walked into Dr. Grindon's office a very remarkable apparition, a lady with a blue dress, blue eyes, blue face and blue hands. She stated that she had awakened with a headache, taken a powder, and, not getting better, in fifteen minutes had taken another. Soon after she took a third. Then she "felt queer," and going to the mirror to see if she looked pale, discovered that she was blue. Almost every physician has seen patients made blue by these headache powders. This particular coal tar preparation, being the cheapest of the lot, was oftenest used in these preparations. Something could be done by spreading among the people a knowledge of these things, but more could be done by the enforcement of existing laws.

Dr. T. A. Hopkins said the case to which Dr. Lewis referred gave a very instructive lesson in the possibilities of the so-called digestive treatment of stricture. The patient was referred to the speaker by the physician who applied this treatment, it having been his first, and presumably last, experience therewith. The history of the case was secured from the patient. At the first examination he found a large fistulous opening on the underside of the penis near the peno-scrotal juncture, considerable inflammation and œdema, and a purulent discharge from the fistula. The urethra anterior to the fistula seemed entirely closed by the inflammatory process and its condition posteriorly could not at that time be determined. The patient gave a history of stricture so developed as to impede the flow of urine, but not to hinder its flow in a stream and with some force. Operation was advised, but he strenuously objected to the use of the knife, and the doctor decided to employ the "digestive treatment." This was done some days before Dr. Hopkins saw the case. The digestant was applied under cocaine anesthesia, left in the urethra, and the patient sent to his home and instructed to remain quietly until the next morning, when it was expected he would be able to resume work. About two hours after the application the pain became so extreme that he returned to the doctor and was comforted by a hypodermic; later a distended bladder and inability to urinate led to sending for the doctor; attempts to catheterize were without

avail, though a few drops of urine did make their way through the urethra, but not sufficient to relieve his distress. A tumor appeared at the peno-scrotal juncture, the site of the fistula, which was diagnosed as an abscess, but which the speaker concluded was a balooning of the urethra. The patient's opinion was that this had burst, but Dr. Hopkins thought it must have been incised. From that time urine had passed from this opening and the urethra anterior thereto had been out of commission.

The patient was still of a mind to refuse absolutely to allow operative treatment, though it was so evidently and urgently indicated. Dr. Hopkins succeeded in passing a filiform, and during some weeks gradually dilated the strictured urethra until he was finally able to pass a No. 14 F., and had gotten the whole urethra in a better condition. The fistula remained open. The patient disappeared for a number of months, and it was on his return that Dr. Lewis saw him first. His appearance indicated a general poisoning, and local conditions were anything but promising. In spite of a very gloomy prognosis the patient was at last ready for an operation. The operation was done before the class at the Marion-Sims-Beaumont clinic. A mass of sinuses, pus pockets and matted tissue filled the lower pelvis and involved the penis and scrotum. There were also an aggravated, purulent cystitis and an involvement of the kidneys. That the patient lived but a few days after the operation was no surprise to any who saw the condition. Neglect and a fear of the knife were doubtless contributing causes to his death, but behind all this lay the real origin in the use of the digestant which precipitated the whole trouble.

The theory on which the digestant treatment is based is that stricture tissue is scar tissue, and, being such, can be digested, while (it is held) living tissue will not be affected by the agent. The inaccuracies are evident. He never had been able to get the formula used in this case, but was given to understand that the digestive agent was some form of papoid.

Dr. Lewis, in closing, said there had been considerable progress in disseminating knowledge among the people to the end of limiting these diseases, practically and not theoretically. Any one desirous of keeping in touch with the progress of the work should write Dr. Prince A. Morrow, of New York. The members of the medical profession should think over the matter, and each try to evolve in his own mind, methods that would succeed in obtaining proper results. It was worth while to think over practical means by which these diseases could be restricted.

PRESENTATION OF A CASE OF UNUSUALLY LARGE ABDOMINAL ANEURISM.*

By Hart Goodloe, M. D., of St. Louis.

This unusually large aneurism is deemed worthy of presentation and record on account of its *position*, etiology, enormous size and resultant nervous symptoms.

Mr. H. Luft, age thirty-nine, occupation teamster, came to St. John's Medical Clinic September 21, 1905, complaining of a severe, constant pain in the left side—corresponding to the left lumbar region. The patient volunteered the information that he had been treated by two or more physicians for over two years for lumbago, but instead of the pains being relieved they were growing steadily worse.

Family History.—Mother alive, age seventy-four, in good health. Father died sixteen years ago at the age of fifty-nine from heart lesion, secondary to rheumatism. Three brothers, one sister—all well and healthy.

Past History.—No serious illness, no rheumatism, with a negative history of syphilis.

Habits.—Beer drinker.

Three years ago he received an injury, and quoting in part from one of the local newspapers that reported the accident at that time, viz.:

"He was driving on top of a wagon heavily laden with lumber on Gravois avenue near the city limits, when a Cherokee car crashed into the wagon. Luft was thrown from the wagon and the lumber was overturned upon him. When he was dragged from beneath the wreck he was taken to the South side Dispensary, where Dr. E. found that he had severe concussion of the brain, and that he was bruised all over his body. He was sent to the City Hospital and the doctor said his condition is serious."

At the City Hospital there were found two scalp wounds, which were examined for fracture; none being found he was sent home the same evening. (May add here the wagon had fifteen hundred (1,500) feet of lumber chained down and weighing approximately four thousand five hunhundred (4,500 pounds.)

He remained in bed at his home for two weeks, suffering the greatest pain in the left lumbar region, and after sixteen weeks of invalidity tried to resume his former occupation—but on lifting heavy objects he had pain in the left side, which progressed in severity on exertion until he was compelled to give up his work entirely.

About the middle of last April, 1905, he noticed a swelling over the painful area which was hard to the touch, but not painful to pressure. He thinks this came in the night, and in his opinion seems to have increased in size since then. About the same time he noticed his left leg began to tremble, and had pains radiating down the outside of the thigh, from the hip to the knee.

During the last few months, patient states he has had at different times girdle sensations.

Patient sleeps very little on account of the constant dull, boring pain. Walking or standing for a

* Read before the St. Louis Medical Society November 11, 1905.

short time is said to greatly aggravate the pain over the hip bone and outer surface of the left thigh, and in the last three months he says that the peculiar tremble in front of the left thigh has become jumping in character. The jumping is so severe at times when walking, he is compelled to stand still and for several moments hold firmly the muscles, with the left thigh flexed on the abdomen and the leg flexed on the thigh, before he can continue further.

When lying down he must be careful to keep the "knee bent" or the jumping will begin. He can only rest, as he expresses it, "curled up," and not able to sleep on his right side at all.

Patient lost about forty pounds in the last eight or nine months; appetite fairly good.

There is no history of bladder or rectal disturbance.

Inspection.—The patient's expression indicates long suffering and anxiety. A well marked eruption is seen distributed over the face and body, which is iodism.

On standing, the patient rests his weight on his right leg, with his body leaning to the right side and abducts his left leg and foot with his toes resting on the floor, relaxing as much as possible the muscles of that leg.

On sitting down, he puts his hands on the arms or seat of the chair, cautiously and easily letting himself down, leaning to the right side and continuing to support the body with his arms.

His gait is cautious; none too steady; and not spastic.

When first examined there was marked clonic contractions of the quadriceps extensor of the left leg alone, but now of the right quadriceps, together with the glutei adductors and "ham-string" muscles of both sides. [Have left a fuller report of the findings of the nervous symptoms to Dr. William W. Graves, and will refer to them later.]

Posterially.—When the clothing is removed there is noticed an exaggerated teamster's curve (kyphosis); from the history of having worn shoulder braces, it is believed he has had this from boyhood; patient thinks, however, that he has become much more stooped of late. There is also a scoliosis, of which he has been unaware until a recent date. The upper curve extends from the spine of the fourth dorsal vertebra to the spine of the twelfth; the lower curve from the spine of the twelfth dorsal vertebra to the spine of the first sacral vertebra.

In the concavity of the lower curve, and to the left of the bodies of the lumbar vertebræ, is seen a large pulsating tumor projecting out between the bony land marks, filling the entire space; bounded above, by the left twelfth rib, to the right, by the lumbar vertebræ, below by the superior border of the left crest of the ilium.

In the dorsal region, between the fourth and the twelfth, spinous processes is noticed a slight fullness.

Anteriorally.—Is noted some enlargement of the left abdominal side, including the left hypochondriac, umbilicul, iliac and lumbar regions, which can be seen to pulsate.

Palpation.—With the right hand over the left lumbar region, and the left hand on the upper iliac or umbilical region, making steady, gentle

pressure, a tumor of considerable resistance is felt conveying a marked forcible expansile impulse, synchronous with the heart beat; also on the left side of the dorsal vertebra from the fifth down, quite a little resistance is felt. On the right tenth rib is a well marked bony prominence, showing a previous fracture which the patient, although unaware of it, more than likely received during the injury.

The heart sounds are clear, forcible and regular, with the apex beat at the lower fifth interspace in the mammary line. The carotid artery has a peculiar recoil. The femoral arteries can be felt to pulsate on both sids and are very weak; likewise the dorsalis pedis.

Percussion.—Posterially, to the left of the third spinous process of the dorsal vertebra there is dullness of about one finger's breadth; just below, on a line with the fourth dorsal spine, the dullness is two finger's breadth, steadily increasing to the eighth spinous process, where it is four finger's breadth. Below this point there is relative dullness over Traube's area. Swinging to the left complete dullness is found over the ninth intercostal cartilage, which can be traced downward just to the left of the umbilicus and linea alba below, to a plain midway between the anterior superior spine of the ilium, and the spine of the pubes.

You will see on the patient, when he is presented, dotted lines indicating the dull area.

Auscultation.—A distinct bruit is heard over the entire dull area, except Traube's space.

By the physical signs an eliptical shaped tumor is made out, with its long diameter downwards, a little forwards and outwards.

Measuration, approximately of the long diameter of this tumor is seventeen to eighteen inches; the short diameter about eleven and one-half to twelve inches.

Dr. Graves' report on the examination of the patient's nervous system is as follows:

"*Cranial Nerves Show Normal Functions.*—There is coarse tremor in slightly closed lids, in protruded tongue, in lips when patient shows teeth and when talking, in fingers when separated. McCarth's reflex and "jaw jerk" are active. Quinquaud's symptom of phalangeal crepitation is present in fingers of both hands.

The motility of neck and upper extremities during active and resisted movements is entirely normal. Passive movements reveal no rigidities in these parts. The muscles and accessible nerve trunks of upper extremities are not tender to pressure. Radial and triceps reflexes are rather exaggerated on both sides, but no difference is apparent between right and left.

Rombergism is not present. The gait is neither ataxic nor spastic, but it is notably careful and the trunk is kept in a rather fixed position and inclined rather slightly toward the right as patient walks to and fro through the room.

When standing, the weight of trunk is invariably shifted to the right lower extremity, while the left assumes a position of slight flexion at hip and knee, with foot turned outward and resting easily on toes. Then patient

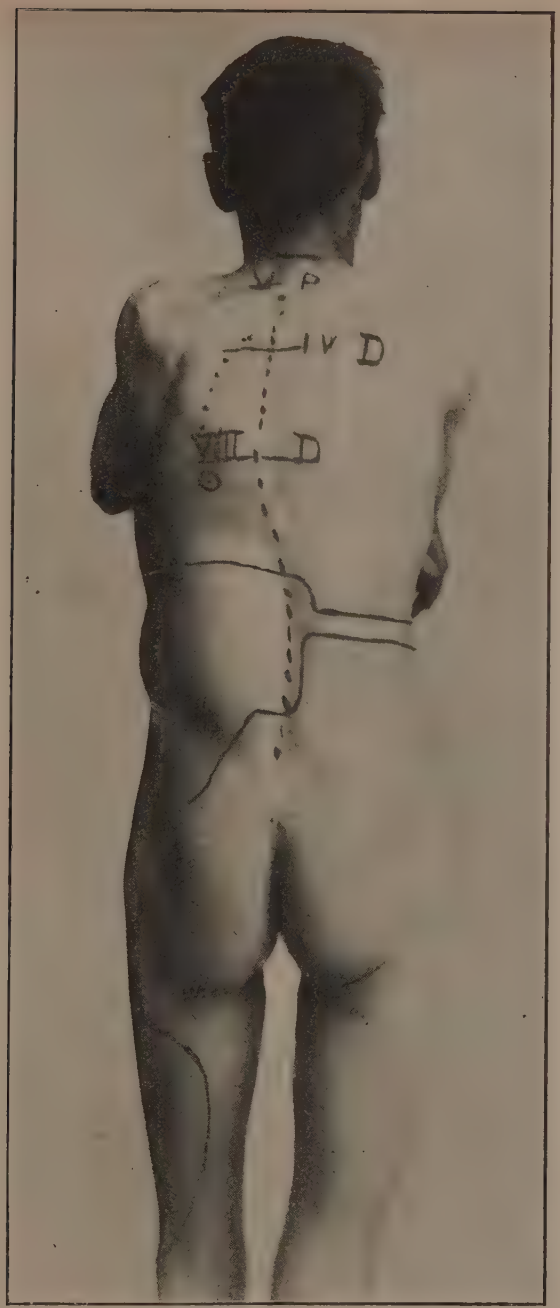

FIG. 1.—V. P., vertebra prominens. IV D, fourth dorsal spine. VIII D, eighth dorsal spine. Dotted line to left of dorsal vertebræ—superior external border of the aneurism. ⊙ Beginning of Traube's relative dullness extending to ninth intercostal cartilage. Black lines on trunk-hyperesthetic area, upper left side corresponding to distribution of the seventh spinal segment; lower to left ilio-hypogastric nerve. On right, distribution of the eighth spinal segment. On the left thigh, at first hyperesthetic, afterwards hypoesthetic area corresponding to distribution of the external cutaneous femoral nerve.

stands firmly on both legs, constant clonic contractions soon become visible in the quadriceps and adductors, and after a few minutes similar contractions may be seen in "ham string" and "calf" muscles of both extremities. Upon lightly grasping the circumference of either thigh with both hands this clonic spasm of the muscles may be felt as rapid and rather uniform contractions.

The fifth, sixth and seventh dorsal spines are tender to firm pressure, especially the fifth, sixth and seventh. The seventh and eighth are rather more prominent than the adjacent spines above and below, and the eighth shows the greatest deviation from the median line.

The dorsal kyphosis likewise reaches its greatest height at about the eighth dorsal spine. Coughing or sneezing, or sudden jars, as in walking, are said not to cause pain in spine; neither does suddenly applied pressure to top of head or to shoulders provoke pain. When a test tube containing hot water is slowly drawn downward over the spinous processes patient cries out with pain when the fifth dorsal spine is reached. The pain thus provoked is said to be equally intense when the hot tube is placed over the sixth and seventh spines. A similar test with a Faradic current of moderate intensity gives similar results. The spine is held in a fixed and rigid position, whether patient is lying, sitting or standing.

There are no muscle atrophies about lower extremities, and joint excursions are normal, both to voluntary and resisted movements. There is no difference between right and left as regards muscle strength, and the same is in proportion to muscle volume.

Passive movements reveal a decided spasticity in the quadriceps muscles, less in the calf muscles, and still less in the adductors. The knee jerks are equal but enormously exaggerated, the slightest taps are sufficient to set up "clonus" in the quadriceps muscle. Patellar clonus is readily obtained on both sides. The Achilles jerks are likewise exaggerated, but less active than the knee jerks. Ankle clonus is present on both sides, but is *not* decided. Plantar reflex normal. Babinski's and Oppenheim's reflexes are absent. The cremasteric reflex is absent on the left, present on the right. The abdominal reflexes are present and active in lower and middle divisions, but in upper divisions are very weak, and at times not obtainable.

A sensory examination of trunk reveals a zone of hyperesthesia about one inch wide extending "girdle" fashion about trunk and corresponding approximately to the skin distribution of the seventh dorsal segment on the left, and the eighth dorsal segment on the right. This zone corresponds accurately to the location of the girdle sensation, of which the patient has complained from time to time. Sensation is nowhere diminished below the zone. On the right the lower margin of this zone can be as accurately determined as the upper margin. On the left, the lower margin of this zone becomes united latterly and posteriorly with, and cannot be separated from, the upper margin of a hyperesthetic area, which corresponds roughly to the outlines of the tumor.

Still another hyperesthetic area is

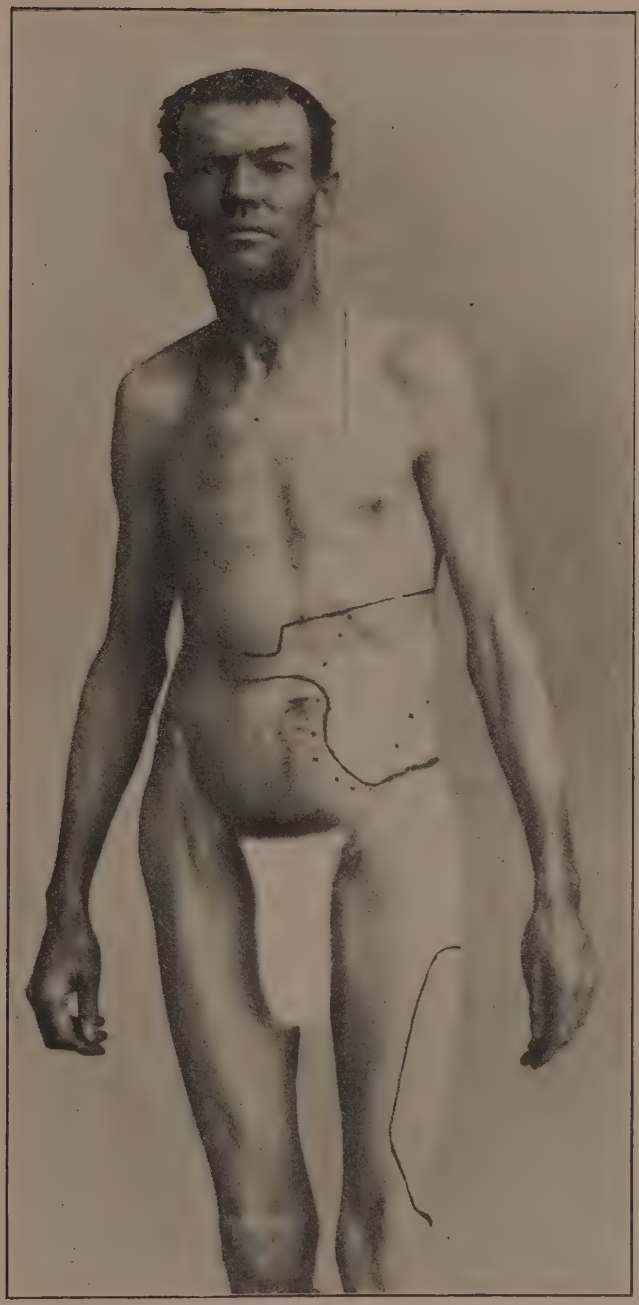

FIG. 2.—Dotted lines, outline of tumor. Black lines, as described in figure 1.

found on the outer surface of the left thigh, corresponding closely to the distribution of the external cutaneous femoral nerve. The hyperesthetic zones and areas are outlined on the patient's body and are best studied by inspection. Within the areas thus outlined hyperesthesia is present to pinpricks, temperature and "touch."

The sensory findings just read were obtained November 8th, and on the morning of November 9th, the patient stated that he had suffered no pain in left leg during the night. In going over the sensory examination again, the findings were the same as on the 8th, excepting within the distribution of the external cutaneous femoral nerve, where pinpricks were scarcely perceived as such. Touch was not perceived as acutely as in adjacent skin, but temperature hyperesthesia was still present.

A third sensory examination, made November 10th, revealed the findings to be practically the same as on the 9th. The patient has not had a recurrence of pain above outer surface of left thigh.

A consideration of the objective findings alone afford ample evidence upon which a diagnosis of both central and peripheral involvement of the nervous system may be made.

The objective findings indicating involvement of the spinal cord are:

1. The zone of hyperesthesia extending about the trunk corresponding to the segmental distribution of the seventh dorsal nerve on the left, and the eighth dorsal nerve on the right.

2. Decided and visible clonic spasm of muscles of lower extremities when patient is standing.

3. Exaggeration of knee jerks and Achille's reflexes, with patellar clonus and ankle clonus.

4. The decided spasticity of quadriceps, "calf" and adductor muscles as elicited by passive movements.

5. Tenderness to pressure over fifth, sixth and seventh dorsal spines and the pain provoked by the application of heat or Faradic current to these spines.

6. The decided weakness and failure at times of the upper abdominal reflexes.

The upper level of the cord lesion probably corresponds to the fifth dorsal segment and should therefore be found opposite the sixth dorsal spine.

The lesion up to the present moment is undoubtedly slight in character—probably slight pressure—since all signs are absent indicating a severer lesion.

The objective findings indicating a disturbance in peripheral nerves are:

1. A sharply defined area of hyperesthesia, corresponding to the distribution of the left ilio-hypogastric nerve.

2. A similar area corresponding to the destruction of the left external cutaneous femoral nerve.

3. Absence of the cremasteric reflex on the left.

These areas of hyperesthesia and absence of the cremasteric reflex on the left, are probably due to direct and gradually increasing pressure on certain nerves by the lower part of the tumor. The assumption of such pressure finds justification in the striking change from *hyperesthesia to hypoesthesia* in the external cutaneous femoral nerve, which occurred during

the night between the 8th and 9th of November."

Summing Up the Case.—Abdominal aneurism is very rare in comparison to the thoracic aneurism. Osler says: "Of the 468 cases of aortic aneurism at St. Bartholomew's Hospital, twenty-three involved the abdominal aorta, also the sac is most common just below the diaphragm in the neighborhood of the cœliac axis."

There can be no doubt as to the diagnosis with a definitive tumor, which can be grasped between both hands and felt the pathognomonic symptoms, viz., the expansile pulsation.

The *etiology* of this case *points to trauma*, with the negative history of rheumatism and syphilis — and in view of the fact that he has had more or less pain in the left lumbar region since the injury.

Trauma is given as one of the etiological factors in aneurism in general, but nowhere has the writer been able to find one single case where trauma was given as the direct cause of an abdominal aortic aneurism. Our text books have little or no data on this subject except what "may be" or "may cause."

Babrock on "Diseases of the Heart and Arterial System," devotes no space to the abdominal aortic aneurism, and the only mention is given under etiology. In substance he thinks it possible, but not probable, that trauma could directly cause an aneurism in this locality, but suggests the idea those aneurisms attributed to trama in the descending aorta when associated with a fall, may be due to the sudden rise of blood pressure which may rupture the inner coat of the vessel, and thus become indirect.

In this case it is believed to be a direct traumatic aneurism, but to definitely state where this immense tumor first began would only be a presumption.

The resultant nervous symptoms show how much irritation it has already caused.

The nervous symptoms of irritation, both centrally and peripherally, go hand in hand with the physical signs, viz.:

1. The central irritation which is located at the fifth, sixth and seventh dorsal vertebræ with the area of dullness and the bruit in close proximity.

2. The protrusion in the left lumbar region, with the compression of the peripheral nerves.

Discussion.

Dr. Wm. W. Graves said there was absolutely no doubt but that his findings indicated two distinct lesions of the nervous system in Dr. Goodloe's case—the one due to direct pressure upon peripheral nerves by the aneurism; the other to slight pressure on the spinal cord, the latter being probably caused by erosion of vertebræ in the mid-thoracic region.

Dr. Sidney I. Schwab called attention to the fact that the observation in this paper may be of considerable value in helping to establish the accurate localization of the upper abdominal reflex. He had been especially interested in studying this reflex, and in a recent case of fracture of the spine Dr. Bartlett and himself had been able to find localizing data which tended to confirm the findings of Dr. Graves. The three reflexes compos-

ing the abdominal reflex would be of some utility as a localizing sign if each of them could be assigned to separate segments in the spinal cord. The usual localization of the whole of the abdominal reflex was given as the fourth to the tenth or eleventh thoracic segments. In cases in which the two lower reflexes were lost and the upper was present, and in addition it was feasible to determine the probable localization of the lesion by means of the sensory segmentary deviation from the normal, then it is possible to limit the upper line of the lesion in the spinal cord. In the case seen with Dr. Bartlett, in which, as in this case, the upper reflex alone was present, it was possible at the operation to localize the upper abdominal reflex at the tenth dorsal segment. The findings in these two cases seemed to indicate that the localization here obtained might be of some use in the future.

Another point in the report of this case of great interest to the neurologist was the assumption almost necessary that there were two sources from which the symptoms might arise—a central and a peripheral one. The sensory disturbances on the thigh could not be explained except by assuming that the growth was multiple. This always carries with it a certain amount of danger. In this case, however, it seems clear that there were two different sorts of pressure—one producing the peripheral symptoms and one the central group of symptoms. Another point of great interest was the fact that there was at first a hyperesthetic area on the thigh which, later, gave place to an anesthetic area in the course of a few hours. Dr. Graves' idea was that in such a case the pressure at first caused pain, which afterwards gave place to the anesthesia owing to the degeneration of the nerve. This is ingenious enough to warrant some consideration. However interesting this case might be from the clinical point of view the neurological data deserved attention. In all lesions of the abdominal or thoracic cavity even remotely affecting the spinal cord, the neurologist should be given the opportunity of collecting the data in order to increase the number of facts which supported more accurate localization in the spinal cord. S. Weir Mitchell has emphasized the importance of this over and over. It is only by constant repetition that the facts so observed can be made use of in the diagnosis and the localization of pathological processes in the spinal cord. This is an ideal case showing how the neurologist and the internist, working together, could obtain so valuable a lot of data referring to the possible localization of the upper abdominal reflex in the spinal cord.

Dr. Goodloe, in closing, said that the etiology was interesting to him, as well as the nervous side of the case, on account of the scarcity of data in the traumatic aortic aneurism and in view of the fact that most injuries of so severe a character had been sufficient to cause death. In this instance the weight of the lumber which fell upon the man must have been sufficient to break the rib by indirect violence, yet not enough to fracture the vertebral bodies. The pathology was wholly speculative, but a point or two might lead to the belief that this was a sacculative tumor

wholly on the left side. Another interesting point is the scoliosis. The patient had not noticed this before the injury, and the question may arise, is it due to pressure of the tumor directly upon the spinal column, or did the patient acquire it from the position he assumed because of pain?

PRESENTATION OF SPECIMENS.

Aneurism of the Aorta—Dr. Ernst Jonas.

I thought you might find it of interest, in connection with this paper, to look at a specimen of abdominal aneurism which we acquired about eight months ago at an autopsy. A lady came to Dr. Tuholske's office, saying that operation had been recommended for retroflexed uterus, and asked if the operation were advisable. We found the classical signs of fixed retroflexed uterus, and, at first, were inclined to say, "Go ahead and have the operation done," but, on further examination, we found in the epigastric region a tumor larger than the fist. It was pulsating and showed all the signs of an aneurism. The question was, where was that aneurism located? Was it in the aorta or in one of the branches of the aorta; probably one of the branches of the celiac? Or might it be a tumor closely connected with the aorta, getting the pulsation from the aorta? Against this supposition were the bruit and other signs we find in aneurism; so we made a diagnosis of aneurism, leaving doubtful only the location. We recommended an exploratory laparotomy, hoping it might possibly be an aneurism of one of the branches of the celiac, perhaps in the omentum, which we might remove *in toto*, or perhaps an aneurism of one wall of the aorta, in which case we might cut down upon the sac and restore the aortic artery to its normal size, after making the aorta temporarily bloodless. This was mentioned as a possible, but untried, method by Mattas.

A few weeks before this case came to our attention, Dr. Tuholske had successfully performed such an operation for a femoral aneurism. After opening the abdomen he found an aneurism of the aorta closely adherent to the neighboring organs. Dr. Tuholske considered it inadvisable to explore further, and the abdomen was closed. Several weeks later the patient died suddenly. At autopsy we found this aneurism about three inches above the bifurcation of the common iliacs, and a very large retroperitoneal hematoma.

Aneurism of Aorta—Dr. John C. Morfit.

In connection with the paper I wish to present a specimen of aneurism about the celiac axis. The patient, a man about forty years of age, had been in one of the hospitals of St. Louis for some time, and was supposed to be hysterical or a morphine fiend, as he was constantly asking for sedatives to relieve his real or imaginary pain. He entered Mullanphy Hospital, where he came under my care. When I first saw him he was having a kind of violent colic, and was asking for morphine. He had an expression of pain, which seemed to be half real and half imaginary, but there were enough abdominal symptoms to make sure that there was

some physical ground for the complaint. Pain and tenderness were everywhere present. After going over him I concluded it was either appendicitis or some renal condition, and I sent him to the genito-urinary department. They promptly excluded the possibility of any renal involvement, and he was returned to the surgical department. About twenty-four to forty-eight hours after the ureteral catheterization there was a very definite right inguinal tumor noticeable, and we decided to do an exploratory operation, as it looked like appendicitis. There was a slight swelling in the median line between the zyphoid and the umbilicus, and also a dull percussion note high above the hepatic line in the right thorax. These were only significant in view of the conditions we found later.

We put him on the table, and before I had cut through the peritoneum I found a blood clot. The peritoneum was extremely pale. There was no appendicitis. My impression was that there had been some injury to the ureter, which seemed to be in a tube of blood clot about two inches in diameter. The perirenal fat seemed partly digested, and was in a mass of blood clot twice or three times the normal size of the kidney. While exploring there was a rush of blood, not a great quantity, and the patient suddenly died. This hemorrhage on the table was less than I have frequently experienced with safety, but, in addition to the preoperative hemorrhage, was sufficient to cause collapse. I continued the exploration, and under the peritoneum and all around could be seen ecchymoses, but there was no blood in the peritoneal cavity. Between the liver and the diaphragm I found a mass of blood clots as big as a man's head. Then we began to suspect the origin of the condition, and upon following up the abdominal aorta this aneurism of the celiac axis was found. The condition had been going on a long time; the dissecting fluid had gone down along the ureter and around the bladder, and up the ureter on the other side, besides separating the muscular layers of the abdomen, so that the amount of suffering the man had endured can only be understood when we take into consideration the enormity of the hemorrhage.

In regard to the etiological factor of trauma in these cases, it seems to me, in the light of the frequency of rupture and injury to the viscera without any apparent injury to the abdominal parietes, that it is not going too far to suppose there might be some rupture of one or more of the vessel walls as easily as of the kidney, spleen or intestines by a similar force.

NEURASTHENIA; ITS COMPLICATIONS AND TREATMENT.*

By John Punton, M. D., Kansas City, Mo.

Historical Data.—The term neurasthenia was supposed to have been first used by Dr. Beard, of New York, in describing a general morbid weakness or exhausted state of the nervous system. The existence of the affection, however, was hinted at as early as the fourteenth century by European medical authors, but whose views and opinions were rendered wholly impractical by virture of their obscure theoretical speculations, and nothing of a tangible scientific character was forthcoming, relative to neurasthenia until the appearance of Beard's famous monograph in 1869. Later investigations, however, revealed the fact that his claim to priority in the use of the term was an erroneous one. To Dr. VanDusen, of Kalamazoo, Mich., belongs the honor of having used it as early as 1867 in his valuable paper entitled "Observations Upon a Form of Nervous Exhaustion or Neurasthenia culminating in Insanity." It has since been shown that neither of these physicians invented the term, as it can be found in Dunglison's Medical Dictionary published in 1833.

Notwithstanding these facts, the medical profession is under lasting obligations to Dr. Beard for the persistent manner in which he emphasized the importance of its study, thereby acquiring for himself an enduring monument in medical science. Prior to his labor in this direction, much confusion prevailed in the interpretation of a large group of symptoms which were fundamentally dependent upon a morbid weakness of the nerve centers, but which had been previously ascribed to diseases of various visceral organs involved, such as perverted conditions of the kidneys, liver, stomach, uterus, and other organs implicated in the pathologic process. The result of Beard's work, however, led to a more thorough systematic study of its pathogenesis, and the conclusion so far reached warrant the assertion that the term expresses an affection which does not limit itself to any part of the nervous apparatus, but affects it as a whole. Hence it is an extremely generalized condition, and often found associated with both functional and organic diseases.

Its extremely generalized character may therefore affect the brain, spinal cord, peripheral nerves, the visceral organs, and indeed all parts of the human organism subject to nervous inervation. Consequently its symptomatology is exceedingly extensive and varied. This wide range of involvement has led to much confusion and is the responsible agent for the vague ill-defined notions entertained by many concerning the true nature and character of neurasthenia; some physicians even going so far as to deny its existence altogether as a clinical entity.

Definition.—Laying aside, however, all controversy, the consensus of opinion to-day by those most competent to speak, declare that neuras-

*Read at the annual meeting Missouri State Medical Association, Excelsior Springs, May, 1905.

thenia in its quintessence is a true fatigue neurosis characterized with an increased morbid reaction of the ganglionic nerve centers to all kinds of impressions, both mental and physical, whether slight or profound, producing an excessive nervous weakness and nervous irritability, which constitutes its chief cardinal symptoms.

Classification.—Moreover neurasthenia is variously classified by different authors according to its etiology, symptomatology or the apparent seat of lesion. Hence we may have cerebral, spinal, traumatic, sexual, toxemic, reflex and many other forms of the disease. While no doubt this method has some advantages, yet it often proves very confusing and somewhat misleading.

A classification that recognizes neurasthenia in its entirety is to my mind, therefore, much preferable, and from this standpoint it can be reduced to two classes, viz., *complicated* and *uncomplicated neurasthenia.* In the former it may be found associated with any functional as well as organic disease, such as epilepsy, syphilis, malaria, gout, rheumatism, uterine disease, sexual perversion, hypochondria, dementia precox, melancholia, paranoia, and other forms of insanity. In the latter class it presents itself by a conspicuous absence of any such complications, in which case it is known as *simple or uncomplicated neurasthenia.* The effect of either class, however, produces symptoms as we shall presently see, which may be referred to both the physical as well as the mental constitution of the individual, and present a wide range of clinical phenomena which for the most part is subjective in character.

Etiology.—While the causes of neurasthenia are both predisposing and exciting, recent investigations demonstrate that for its production two conditions are indispensable, viz.: a relative vulnerability of the organism and a noxious agent of some kind. These two etiologic factors vary enormously in their influence in different persons; sometimes the one predominates, sometimes the other, but usually they are more or less combined. It is clear, however, that the element of antotoxemia enters largely in its production, giving rise to tissue changes that are commonly found associated with its known pathology. Its common association with gastro-intestinal disorders and occasional prolapse of the various abdominal organs led "Glenard" to add enteroptosis as an etiological factor, while "Dunton', has recently emphasized its close relation to cardiac disease.

The continued result, however, of nerve strain from any cause that forms so prominent a factor in American business, social, political and professional life, operates upon the physical and mental organization in such a manner as to exhaust strength or vital force more rapidly than recuperation takes place. Consequently nervous exhaustion or neurasthenia ultimately ensues. More especially is this found to be true of persons inheriting a neurotic diathesis, as this renders them more susceptible to the baleful influence of the common causes of neurasthenia. Indeed, heredity plays a very conspicuous part in its pathogenesis, as a very large proportion of those who suffer from

neurasthenia are found endowed with a hypersensitive nervous organization which can be directly traced to transmitted neuropathic taints. Excess and abuse of all kinds, with faulty methods of living, operating upon such an individual are recognized by all authorities to be potent factors in its production. The presence of known hereditary defects, however, is not always essential to the diagnosis, as the causes of neurasthenia are known to be both congenital and acquired.

Symptoms.—That the cardinal symptoms of neurasthenia present well marked evidences of weakness and irritability of the gangloinic nerve centers, which in themselves are expressive of fatigue, is now a well established scientific fact. Weakness and irritability of the nervous mechanisms that preside over the various bodily organs are, therefore, the chief clinical phenomena belonging to any and all varieties of neurasthenia. These may present themselves in all degrees of intensity and are usually accompanied with other symptoms, which denote the particular functions of the nervous system that are involved in the process. Hence, we may have disturbances of the motor, sensory, reflex, trophic, secretory, visceral and psychical mechanisms which furnish a wide and varied range of clinical phenomena. But it matters little what part of the nervous apparatus is included in the pathological process, the two dominating factors that are present and common to all varieties, and that which defines neurasthenia as a distinct clinical entity are weakness and irritability of the various nervous functions involved.

Pathology.—While it is true that much speculation has been indulged in relative to its pathology, we are still compelled to admit that so far we are unable to positively declare what the actual pathological changes of the nervous elements are in neurasthenia. The two important symptoms, viz.: morbid irritability and morbid weakness of the nerve centers, however, have been shown by "Hodge" to be due to changes in the nerve cell itself, and that the lesion of fatigue is a loss of cellular substances involving the nucleus protoplasm, and even the capsule itself. According to Dercum, this waste of nerve substance has been demonstrated by "Mosso" to alter the constitution of the blood, producing a true toxemia that strongly inhibits the physiologic action of the nervous elements distributed to the voluntary muscles and other organs of the body.

"Abrams," in his recent publication, claims that defective energy from any cause leads to abdominal venous congestion tantamount to asphyxiation of the abdominal visceræ, diminishing their vital tone and resistance producing toxic products, which have a specially poisonous influence upon the sympathetic nervous system which leads to the occurrence of not only nervous exhaustion, but also attacks of the "blues," which often amounts to true melancholia. "Savill," who has thoroughly investigated the pathology of neurasthenia, leads him to believe that it may arise under four different pathological conditions, viz.:

First.—Toxic blood states, which include the neurasthenia which supervenes on, and is associated with, prolonged gastric disorder and constipation. This he calls *toxic neurasthenia.*

Second.—Malnutrition of the nervous system which arises in various debilitated conditions, or *malnutrition neurasthenia.*

Third.—Over-functioning or fatigue of the nervous system, such as may arise in all exhausted states, or fatigue *neurasthenia.*

Fourth.—Emotional shock or strain including traumatism.

By far the most frequent form, he claims, belongs to the first class or as due to toxemia, the resulting neurasthenia often arising as a consequence of disordered digestion.

The reduced nervous energy which results from any of these conditions seriously affects the visceral organs and nutritive functions of the body, and are clinically expressed by a marked weakness or inaction, as well as want of vigor of the various somatic processes. A feeling of bodily weakness or illness is thus engendered, which attracts the attention of the patient to himself, giving rise to morbid introspection and suspicious fear which later form the basis of all the various forms of nosophobia. This pathophobic tendency also leads to the development of despondency, petulance, selfishness, irritability, moodiness, hilarity, indecision, doubt and vacillating conduct, all of which are marked features in the incipient or formative stages of insanity.

Complications.—The close relation which exists between neurasthenia and insanity, therefore, cannot be overestimated; indeed, the kinship one bears to the other is often so closely allied as to almost establish a true equivalency. This clinical fact, although first recognized by Van Dusen, was again emphasized by myself in 1898, before the American Medical Association, but its true value and practical significance has failed to be sufficiently impresssd until the recent able article published by Dana, entitled "The Passing of Neurasthenia," in which Dana not only urges upon the medical profession the extreme relational importance of neurasthenia and insanity, but also differentitates the chief clinical characteristics of these minor psychoses. To use his own language, he contends that "a large number of the so-called neurasthenias and all the hysterias should be classed as prodromal stages, abortive types or shadowy imitations of the great psychoses, for in these cases it is the *morbid mind* that dominates the situation, not a weak eye muscle or a poor stomach, a heavy womb, uric acid, arterial sclerosis, or even an exhausted motor nerve cell. They are not often, to be sure, pure psychoses, for the body is also at fault, but the psyche is in main control and it gives the stamp to the clinical syndrome, directs the prognosis, and most acutely solicitates the treatment."

The practical clinical value and significance of the attitude thus assumed by Dr. Dana can readily be understood by those who come in daily contact with persons said to be suffering from the various nervous disorders, while his claims are amply sustained and justified by my own college and hospital clinical experi-

ence, as well as by the case records of those admitted to my private sanitarium. In our admissions to the hospital it is the rarest exception to find a pure, unadultered or uncomplicated case of either neurasthenia or hysteria; indeed, they are in my judgment comparatively rare conditions. The vast majority said to be suffering from these nervous affections when admitted are found, upon further examination, to be afflicted with a true psycho-neurosis, which we sometimes designate as psychasthenia, or perhaps could more properly be termed psychosomatasthenia.

While the so-called neurasthenias are not true insanities, nevertheless such persons are not endowed with perfectly normal minds, and their maladies and sufferings are largely due to the mismanagement of their mental faculties rather than their bodies, hence nervous prostration is often a polite misnomer for insanity. It is this disturbance of mental equilibrium, therefore, that constitutes the dominating feature of the various psycho-neuroses which so often pass for neurasthenia and hysteria.

Associated, however, with the abnormal psychological manifestations, neurasthenia may be complicated with many functional as well as organic diseases, more especially perhaps those affecting the normal functions of the heart, lungs, liver, stomach, intestines, kidneys, bladder, the sexual organs, and other parts of the body including the special senses in varying degrees of seriousness and which may have arisen primarily as the result of some intrinsic or extrinsic morbid influence or physical deformity. Whenever such conditions, however, are present, they represent true complications of neurasthenia and are not essential features of its clinical entity, while their removal by any form of treatment and more especially by surgery is not sufficient in itself to effect a cure.

This latter remark needs emphasis, for I am certain that too much is often promised, for the operation and even when skillfully performed, utterly fails at times to yield the promised results which in turn proves a sore disappointment to the patient as well as the friends and the additional etiologic factor of trauma being added, speedily tends to aggravate the former mental condition of the neurasthenic state.

The removal, therefore, of an ovary, the repair of a lacerated perineum or cervix, the local treatment of the various uterine inflammations, the fitting of glasses for eye-strain, the removal of an adenoid growth, or even the various operations for enteroptosis, do not in themselves suffice to relieve the morbid doubts, fears, or imperative concepts and other purely psychical manifestations of so-called neurasthenia. Such operations and treatment, while occasionally, perhaps are imperatively demanded, yet at best they are simply means to an end and are only effective when combined with suitable measures to restore the distorted mental equilibrium, Radical surgical operations are therefore rarely indicated in the treatment of neurasthenia, for in the vast majority of cases the subjective complaints of the patient referred to the pelvic visceræ are in large measure false alarms, the product of a morbid mentalization

for the relief of which surgery is contra-indicated.

Diagnosis.—As an aid to diagnosis it may prove useful to state that neurasthenia, strictly speaking, rarely occurs under twenty years of age; what we usually see then, before this age, is pseudo-neurasthenia, which includes the early stages of dementia-precox, manic depressive, insanity or some early developement of phrenasthenia, which term Dana prefers to use for hysteria. After the age of twenty, however, we are more apt to encounter the incipient stage of manic depressive insanity, incipient paresis, toxic and confusional psychoses, following severe illnesses, hypochondria and paranoia, all of which are commonly diagnosticated as neurasthenia.

One of the earliest and most important signs of neurasthenia becoming complicated with mental disorder, is the persistent manner in which the feelings, thoughts and actions of the individual absorb his entire attention. Indeed, this morbid self-consciousness or introspection is the usually marked feature of many of the so-called neurasthenias, but which really betrays the more serious pathogenic invasion of the higher mental faculties, thereby establishing a true pyschosis instead of neurosis. Moreover, this morbid watching of self or egosim is usually clinically expressed in a general feeling of anxiety, distrust or suspicion, which later leads to morbid doubts and fears, and sometimes to impulsive acts which constitute the various obsessions, impulsions, imperative concepts and fixed ideas of true insane delusions, which may later lead to suicide.

These complications, however, present themselves in all degrees of intensity and irresistibly force themselves upon the patient, thus dominating his every thought, word and deed. Unfortunately, too often the close relation which exists between neurasthenia and insanity is entirely overlooked, and even ignored. Consequently many a curable case becomes incurable by failure on the part of the physician to recognize its true mental nature and character. Moreover, its kinship to hysterical states often leads physicians to treat it with contempt, under the mistaken idea that the barometric changes from day to day indicate a fraudulent basis. Nothing could be further from the truth, as there is plenty of evidence in every genuine case of neurasthenia and hysteria to explain their fluctuating tendencies.

It would, however, be sad indeed if, with all the boasted advance which medical science has made within the past decade, nothing more than a name or diagnosis, coupled with a bad prognosis, could be offered those unfortunate sufferers. Fortunately, it is just at this point where the results of modern medical research comes to ours as well as the patient's rescue, by indicating in no uncertain manner the means and methods by which they may escape their pathologic thraldom. Hence the crowning glory of modern medical science consists in demonstrating that its tenets are sufficiently able to offer to all such sufferers partial, if not complete, redemption from their affliction, provid-

ing they are willing to strictly obey its therapeutical precepts.

If, at a conservative estimate, 30 per cent. of actual insanity is curable, we can declare without any hesitation that at least 75 per cent. of these minor psychoses are also curable, providing we recognize early the special organ which is most in need of appropriate therapeutic attack. Unfortunately, it is the failure to discover early that in nearly all such cases we are dealing from the start with a psychosis instead of a neurosis, and this mistake so often proves disastrous to the patient. While, therefore, we procrastinate or wait for further developments, the disease itself not only becomes more confirmed, but actually incurable, in spite of the use of all our temporary expedients.

Treatment.—In the foregoing text we have thus endeavored to show that neurasthenia, in a strictly technical sense, is a comparatively rare affection, but that the *conditions* so *diagnosticated* are more often morbid mental states with physical expression, thus constituting true psycho-neuroses, which in themselves are often the forerunners of actual insanity. In its treatment, therefore, we are of necessity compelled to recognize the morbid mentality of the patient as the primary essential element underlying the various abnormal clinical phenomena. Hence, to be of value, our therapeutics must necessarily take cognizance of any and all measures that not only appeal to, but tend to strengthen the various sub-forces of the mind, as well as the correction of faulty functionalization of the various somatic processes which may result from abnormal conditions of inheritance, imperfect growth, defective nutrition, incorrect habits, injudicious education, accidents and injuries, acute diseases, faulty elimination, sexual excesses, mental and physical strains and shocks of all kinds.

In spite, however, of the numerous physical infirmities associated with these various psycho-neuroses, I repeat, the dominating pathological factor, and that to which all others are subservient, is the morbid mentalization of the patient. For the relief of these psychical defects nothing short of *education* or *pedagogical* measures, combined with rest, are found to be effective. These have for their special purpose the dissolution of the pathogenic ideas pertaining to self and surroundings and the substitution in their stead of healthy mental processes of thought, speech and conduct.

In order for this, the full confidence of the patient must be secured, a task not always easy. And the peculiar mental traits and characteristics carefully studied, which also indicates to the physician not only the nature and character of the new ideation to be established, but also the method of their creation as well as their special cause. To favor the accomplishment of this purpose, the early rigid isolation from home, combined with partial or complete rest, are, in my experience, the most essential curative principles.

The separation from home and relatives, however, often proves to be the most formidable obstacle for the family physician to overcome in enforcing the most approved and scientific modern methods of treatment. All authorities agree that the full control of the life and conduct of the

patient while undergoing treatment is absolutely essential for success, and the removal from home greatly simplifies this healthful expedient. Moreover, the home life, as a rule, furnishes a most fruitful soil for the cultivation and development of the two important evils, viz.: Indulgence and irritability, from which the patient must of necessity be wholly protected.

The numerous excuses of the patient, however, together with the earnest appeal of his friends, often cause the family physician to allow his sympathies to govern his better judgment by yielding to their desires, hence he is so often found compromising with those who believe in *travel* as the most efficacious remedy for such persons, or else he consents to act with those who have great faith in the curative value of certain springs, both of which agents have been carefully and critically weighed in the unbiased balance of modern medical science, and found not only wanting, but grievously disappointing and unworthy of confidence. Not unfrequently the family physician is compelled to listen to the wail of those who espouse the various fads and fakes of the day, like osteopathy, magnetic healing, dowieism, eddyism or christian science, all of which have for their basis the well-known principle of *suggestion* or psychotherapeutics, and which every first-class physician should employ as part of his scientific therapeutical armamentarium.

The essential qualities of mental suggestion should embrace measures intended to produce a new psychical birth or the conversion of the pathogenic ideation into a normal or physiological process of thought, speech and conduct, which also includes improved methods of educational action. Used arightly, it should, therefore, embody the inspiring influence belonging to hope, progress and cooperation, with sufficient force and power as to impress upon the mind of the patient the certainty of ultimate recovery.

This educational plan is also intended to strengthen the inhibitory powers, at the same time restore to the will its normal control of the emotions and intellect, thereby teaching the patient to become more self-dependent, self-confident, and self-reliant, without which all other methods of treatment are unavailing.

For the correction of the various bodily ailments associated with so-called neurasthenia, the judicious use of drugs are often indispensable. As a general rule, however, they are at best a very weak staff upon which to lean; indeed my experience proves that pharmacology, in spite of its marvelous modern developments, is sorely disappointing in the treatment of these various minor psychoses.

It is surprising, however, to find how heavily the average psychasthenic leans upon drugs for relief, and this bad tendency on their part becomes one of the most serious evils for them to surrender. As a general principle, the institution of a regular routine normal habit of life is far more important to establish in such persons than the continuous persistent use of drugs as temporary expedients for the relief of their fluctuating multiplicity of symptoms, as this routine drugging in due course

of time actually leads to the self-dosing habit, or patent medicine vice, which is the equivalent of true drug addiction.

In order, however, to aid digestion, improve assimilation, favor elimination, promote normal inervation of the visceral organs beside favorably appeal to the mind, many agents are employed, chief of which, perhaps, are judiciously selected drugs, hygienic surroundings, electricity, massage, hydrotherapy, employment of all kinds, calisthenics, special diet, amusements, and all forms of helpful suggestions. Surgery has also its legitimate place in the treatment of neurasthenia, and while it is true that such conditions are liable to be complicated with true organic diseases requiring surgical aid, yet I contend that surgery is rarely indicated in its treatment.

In conclusion I desire to once more emphasize the importance of the early recognition of these so-called neuroses as psychoses in their incipiency and urge the necessity of prompt appropriate treatment, for upon these two factors hinge the favorable or unfavorable prognosis. Cases even with a marked hereditary bias may often yield brilliant results if the principles advocated in this paper be firmly and conscientiously carried out.

The physician that can best establish hope for fear, courage for despondency, satisfaction for disappointment, confidence for distrust, peace for obstinate hostility, harmony for discord, happiness for sorrow, and above all, health for disease, is he who most of all meets the numerous exigencies surrounding the average case of neurasthenia.

Gentlemen, may such a privilege as this be ours.

Discussion.

Dr. D. S. Booth, of St. Louis:—In the main I concur in the views of the author of this able paper, hence I have little to say except by way of emphasis. The essayist has certainly not exaggerated the importance of his subject; in fact, that is scarcely possible, since neurasthenia is the most frequent, widespread and distressing disease in nosology. Its baneful influence is not confined to the patient himself, but extends to the home and often to the social sphere in which the patient moves. Its course, marked by exacerbations and remissions, is often accompanied by connubial unhappiness which may eventuate in estrangements and divorce, and if unchecked or not cut short by death from complications or intercurrent diseases, ultimately may lead to suicide or the asylum.

Prophylaxis certainly is proper and desirable, the ideal form of which not only begin in the nursery but extends to the ancestry; however, when this has not been practical and we are confronted with a fully developed, even deeply rooted case, we believe the prognosis most hopeful, as was expressed by the author. This is important in view of the belief that still exists in the minds of the public, and not utterly expelled from that of the profession, that may diseases of the nervous system are purely imaginative if not supernatural, and that their treatment is at best an admixture of guess and experimentation. The prognosis under favorable conditions should be no more unfavorable than

are functional diseases in general, with a relative duration, etc. Several years ago I wrote that "the neuroses were perhaps more amenable to treatment than any other class of diseases," and an increased experience has not changed that opinion. That recovery is frequently slow and eventful is due to the nature of the disease, and the fact that it affects the fountain head of animal dynamics, the result of which is a weakened volitional control, enfeebled circulation, impaired digestion and defective excretion. In other words, the storage battery of physical and mental energy is low, the generators are defective, insulation imperfect, with a constant supply of power to maintain. Is it a wonder, then, that treatment in the beginning is often tentative, and that progress is slow and irregular? That the term neurasthenia appears to be used indiscriminately is due largely to the many and varied functions of the organs affected, as well as the broad application of the term, which includes every degree of functional weakness of nerve cells between normal fatigue and complete exhaustion.

Marcus, in 1889, described neurasthenia as "a change in the functional tones of the whole nervous system with increased excitability and tendency to exhaustion," while Benedict, but two years later, expressed the belief that it "was a psychic disease of cortical origin due to emotion and overstrain;" since which there has been a great deal written as to its proper classification, which is still *sub judice*.

To accept the views of some authors would jeopardize the liberty of most of mankind to-day. Therapeutically it appears of little practical importance whether we have to deal with a functional psychosis or a neurosis, so long as we recognize mental derangement as disordered brain action. Erroneous ideas relative to diseases of the nervous system have arisen from the misconception of mind and its relation to the brain. More than a quarter of a century ago, Ferrier wrote, "that the brain is the organ of mind, and that mental operations are possible only in and through the brain, is now so thoroughly well established and recognized that we may without further question start from this ultimate fact," a theorem certainly fully confirmed, notwithstanding mind is often considered in the abstract. Psychology too often displaces anatomy, physiology, histology and pathology in the study of deranged mentality. In our plea for a more favorable prognosis in fully developed neurasthenia we do not wish to detract from the importance of an early diagnosis and treatment; on the contrary, we would emphasize it, since it is much easier and requires a much shorter time to restore a single deranged organ than it is to restore an organism in which all the interdependent organs are perverted. This subject is especially important to the family physician, to whom the opportunity is often presented in the course of an ordinary professional examination to detect an incipient neurasthenia even before it is suspected by the afflicted or his family, and if he be true to his obligation, long suffering can be averted.

Dr. J. M. Allen, Liberty:—This condition is recognized in two general forms: First, as an autoinfection;

and, second, in its true form, the result of malnutrition of the brain. I believe this all resolves itself into a question of nutrition. Why is it that one-fifth of the blood in the human body is sent to the brain if it is not for the purpose of nutrition? When the nutrition is deficient, of course the condition of the brain cell is deficient. Now, what circumstances will bring about a contraction of the blood vessels continually by which this faulty nutrition is brought about? I venture the assertion that every case is the result of reflex irritation contracting the blood vessels of the brain, finally resulting in a decrease in cell structure, the protoplasm, etc. I believe a large percentage can be cured, and, if neglected, will pass into insanity. I could mention in proof, case after case. If the gentlemen will get down to straightforward, common sense physiology of nutrition, and recognize the extensive effects of reflex irritation, they will comprehend these cases without any trouble. Seventy-five per cent. of these cases are the result of gastro-intestinal irritation, and in particular of irritation in the duodenum, as a basis for the reflex irritation.

Dr. Punton, in closing: My object in writing this paper was to emphasize the close relation neurasthenia sustains to insanity. My judgment is that 95 per cent. of these cases could be cured if recognized in their incipiency, but we temporize until they become incurable. That it is a psychosis from the start, and not a neurosis, is the burden of my paper, hence, underlying every case of neurasthenia and hysteria is a morbid heredity and psychology which must be recognized in their treatment.

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EDITORIAL.

THE STATE BOARD OF HEALTH.

The State Board of Health is greatly handicapped in its efforts to get full reciprocal relations with states foremost in professional requirements, from the fact that under our state law undergraduates are admitted to its examinations on equal footing with medical graduates. As long as the undergraduate is under the law in the exercise of this privilege, and makes a grade of 75 per cent. on general average, the State Board will be obedient to the law's provision. Individually speaking, however, I conceive the law to be lame in this reach of its grace; hurtful alike to the best interest of the student and the public weal. For years the best element of our profession have realized that two terms of six to eight months each, was inadequate time to develop and qualify a doctor of medicine. Under this conviction, and backed by strong professional favor, a few medical colleges undertook, some years ago, to meet the advanced requirements by a graded course and a longer term of study. This movement gave impetus to a vigorous and determined fight in the interest of higher medical education throughout the country, and finally succeeded in forcing the adoption of a normally graded course of study and extending the matriculate term to four years in all medical schools. But the victory of this professional vantage is partially nullified by a present legislative enactment which allows the undergraduate the chance, or the privilege of a chance, to abridge these conditions by taking the State Board examination.

Yet, says one: "If a Junior takes the State Board examination and makes a passing grade, isn't that an earnest of his preparation and qualification to practice his profession?"

No. Such a contention does not even intelligently discern the true merits of the situation. In the first place, State Board examinations are not supposed to be too rigid or technical, some consideration is due students upon diploma evidence of having passed a previous medical college examination, and its further witness of a four years' course of study. Moreover, state examining boards are not intended to over-ride and invalidate medical school diplomas where they are tokens of merit. It is the board's function, rather, to challenge the credential value of these and prove them by an examination, elementary and practical in character, but sufficiently strict to test an average intelligence and qualification in the "tokens" they express. Yet, in the ordeal of this challenge many fail, and some fail repeatedly, proving some diploma credentials utterly worthless, and evidently issued by low grade colleges; and, in too many instances, with a laxity that covers the grossest ignorance. Many Juniors from the better grade of schools will, I know, more readily pass a State Board examination than these titular graduates from low grade schools. But this is not the question. Neither is it prejudice to deny the one and admit the other to examination, but simple justice to both. The titular graduate has completed the matriculate term, but climbed too slowly to reach the goal of its progress and fails of the mark of the prize of his high calling in the challenge of test. But the Junior, though running well in the race, has no right to leave its middle course and seek a "privilege" his talent might usurp, but which is best awarded when he shall have engaged its full period of service. It is the purpose of medical education to make the most and best it can out of a licentiate by a prescribed course of study at the time to develop him. And the heirs of larger promise are the objects of its special care for the honor of professional attainment and the fuller ministry of good to human need.

And the state should not be a party to the injustice of releasing these from the course of study until they have gathered its major benefits. The state might as well give the minor sanction to demand his patrimonial estate and squander it in wanton profligacy before his majority.

Again, other Juniors not in the aforesaid class in point of mental endowment, but still of a somewhat bright, active mind and good memory, who have, perhaps, more often studied up for the special occasion under the very reprehensible quiz compend or "cramming process," take the examination. And, occasionally, out of this number, one of good student parts will make the grade. His "papers," however, show mechanical work, a memory struggle and lack the comprehensive understanding evinced by the more virile minds among the better class of graduates from the better schools.

The Junior, in either instance, gets his state certificate if he makes the grade. But with it he is still an undergraduate and his attaiments are, as yet, too embryonic to fit him to engage in his life's arduous ministry, and he should wisely go on and finish his school curriculum. If he leaves college, goes home, buys a

horse and pair of saddle-bags, hangs out a sign and enters upon the practice of his profession, the chances are he will block his path of progress and lack completeness throughout his life. There are exceptions to the rule, I know, but the handicap is a serious one. No matter how well he may succeed, he will always feel and know his life would have had a larger circle of honor and preferment if he had only waited upon the maturer plans of his college course. The student's matriculate years form the period of best study and preparation for his life's work. Opportunities are his in the lecture room, in the clinics, and in the class associations that will not wait upon him when he leaves his Alma Mater. Discipline of mind in habits of study, incentive for research, observation and experience in the technique of work are the golden assets wrought out of consecutive courses of study.

Stay in training until the mind can assay and harmonize, in a measure, some of the fundamental principles conjoined in theory and practice; wait until you are able to prove the truth of your knowledge, in part at least, by deduction and differential analysis, is the advice I would give to young men or young women in the study of medicine to-day.

Some few, one now and then, may curtail expenses and term of study by taking the State Board examination, but they will also curtail education and dwarf the fruits of their life's later struggle. ROBT. H. GOODIER.

PROSECUTION OF ILLEGAL PRACTITIONERS.

Cass County Medical Society has been active in the work of prosecuting illegal practitioners within its borders. One illegal practitioner has been convicted and sentenced. Another is awaiting trial. This good work has resulted from the co-operation of all the members of the society following upon the adoption of resolutions, a copy of which is published below. This is another evidence of what can be done by united effort.

"Whereas, the physicians of the Cass County Medical Society have positive knowledge of the fact that there are persons practicing medicine in our county in direct violation of the medical laws of our state; and,

"Whereas, it is known by the medical profession that such persons are totally ignorant of the fundamental principles of our science and have in no way complied with our state laws regulating the practice of medicine in Missouri; and,

"Whereas, we believe it our duty as medical men, in seeking to uphold the honor and dignity of our profession as well as to safeguard and protect the interests of uninformed, innocent citizens of our county and state from the impositions of these uneducated imposters, to at once take such steps as are necessary to lead to the prosecution and conviction of all parties who persist in the work of practicing medicine without the necessary qualifications as specified by our medical laws enacted by the general assembly of our state. Therefore, be it

"Resolved, first, that we, the members of the Cass County Medical Society, will at once take active steps to furnish our committee on public health and legislation with all the evidence attainable which may be used in the prosecution of such offenders of our law;

"Resolved, second, that part of such evidence shall consist of the names and addresses of all persons who have received medical treatment from the hands of parties who pose as physicians and who are not legally qualified to practice medicine, accompanied by an affidavit, when obtainable, from the party treated, setting forth as clearly as possible, the facts in reference to such treatment rendered, the amount of fees paid for such treatment, and all other information which will aid the committee on public health and legislation in the prosecution of such violators of our law;

"Resolved further, that when this committee has sufficient evidence furnished them by members of the regular profession of our county, and also by other persons who may be interested in enforcing our medical laws, that it shall be the duty of our committee on public health and legislation to furnish this evidence to our prosecuting attorney, and to take all other necessary steps required to have him proceed to the prosecution and conviction of such parties."

These resolutions were endorsed and signed by thirty-seven physicians in Cass County.

THE POWER AND INFLUENCE OF THE PROPRIETARY ASSOCIATION OF AMERICA.

During the last two or three weeks the newspapers of the country have been publishing from paragraphs to columns of matter denouncing the "unjust attacks on a legitimate (?) business," and abusing *Collier's Weekly* for publishing "sensational articles which are calculated to mislead the public." We have never known before what a noble, self-sacrificing business that of the nostrum manufacturer is, nor have we realized how necessary to human life these nostrums are. Sophistry, half-truths and plausible arguments are so intermixed that, to the ordinary individual, it would seem that the nostrum business is not only legitimate and honorable, but absolutely necessary for the welfare of the race. Except in rare instances this matter has not appeared in the metropolitan and leading dailies, for evident reasons, but the smaller newspapers and those that are less independent seem to be the ones that are compelled to defend the "Great American Fraud." The country newspapers which use the "patent insides" are relieved of any responsibility, for the "defense" is in that part of the paper which they buy already printed.

While these articles have appeared in the public press in all parts of the country practically simultaneously, there is such a sameness about the style, the arguments used are similar, and in general character so uniform, that one at once concludes that they must have a common origin. This conclusion would be reached even if there were no other evidence; but the letter we reproduced last week in a comment on "A Newspaper Free from Nostrum Ads.," written by the chairman of the press committee of the Proprietary Association, clearly proves the source. By the way, the "Communication" which was sent to the newspapers with the letter referred to, was the one from Mr. Bok which appeared in the *Journal of the American Medical Association*, in which

he urged physicians to take up the fight against patent medicines. The object of the press committee of the American Proprietary Association evidently was to convey the idea that physicians are instigating the propaganda against "patent" medicine, and the dear people are being told that this is a fact, and that the doctors oppose "patent" medicines for selfish reasons. Incidentally, the medical profession, the American Medical Association, and the *Journal of the American Medical Association* are sadly abused.

What is this organization that has such a power over the newspapers of the country that it can compel them to speak or to be silent? Does this power lie in its numerical strength, in its wealth, or in the social influence of its members? To enlighten our readers, and, indirectly, the public, we print in this issue a complete list of the members of this Proprietary Association of America, taken from their own transactions recently issued.

A glance at this list will give you an idea of the enormous wealth represented, so enormous that it is no exaggeration to say that it is one of the most powerful organizations in the country, from a financial point of view, and that it is not hard to believe that its members pay to the press of the country at least forty million dollars annually, as stated by one of them. Those who are interested in the nostrum question—whether as it relates to the so-called "patent" medicines advertised directly to the public or to those which are exploited to physicians—will find it worth while to give this list a careful study. In the first place, it will be found that there are few firms in the list which are engaged in an honorable and commendable business. There may be a dozen of these, all told.

Further, it may be noted that scattered through the list are names that are familiar to readers of the advertising pages of medical journals—another evidence of the inseparableness of "patients" and "proprietaries." Another very important fact would be evident if we had space to give the personnel of the firms; a large number of those who under one company are "patent medicine men" under another are, in a very dignified way, exploiting "proprietary" medicines to physicians.

These various firms have banded together, for what? To protect the interests of what Samuel Hopkins Adams calls "The Great American Fraud," to protect the interests of a business that is both infamous and despicable; a business in which few men will, without blushing, acknowledge that they are engaged; a business that thrives on misrepresentation and fraud, that fattens on the gullibility and credulity of the ignorant and that prospers by deceiving the sick and afflicted.

This language may seem harsh. We acknowledge that it is. But is it too harsh when all the facts are known regarding the business and the methods of at least a large majority of the firms which are listed as members of the Proprietary Association of America.—*Journal A. M. A.*

THE ANNUAL PROGRAM.

At the Excelsior Springs meeting, the secretary introduced a motion which provided that the chairman of the committee on scientific work extend an invitation to all affiliated county societies to furnish a list of their members who are to contribute to the program at the Jefferson City meeting, May, 1906.

In accordance with the instructions of the judicial council an invitation has been sent to every medical society in affiliation. The committee on scientific work will probably have a meeting January 2d, by which time it is hoped the titles of all papers to be presented will have been submitted, as upon the number of contributions will depend in some measure the number of sections into which the work will be divided. However, there will be at least two sections, a medical and a surgical.

Titles of papers must be sent to the secretary of the local society, who will transmit them to the chairman of the committee on scientific work.

CLASSES OF MEMBERS.

Elsewhere in this issue will be found a roster of members of the Missouri State Medical Association. Many new names have been added since July, and altogether there are eighty-nine societies now in affiliation. In an effort to insure accuracy, a list of members of each county was forwarded to the secretary that such changes as were necessary should be made. The names and addresses in every instance should be correct.

Some difference of opinion exists in several societies as to the classes of members. The question is definitely settled by the constitution of the State Association, chapter IX, section 1: "The secretary of each county society shall forward its assessment, together with its roster, of ALL officers and members. This leaves no room for argument; there can be but one class of members.

MONTHLY REPORTS.

Hereafter the State Medical Association must report each month any change in the personnel of the medical profession of Missouri to the American Medical Association. That the report may be made, the A. M. A. has supplied the State Association with cards to be sent to the secretary of each local society. These cards are to be filled out in the event of any change in the local society whether it be the addition of a new member, removal to other location or death, and immediately forwarded to the secretary of the State Association. These cards are to form the basis of the monthly report to be made to the American Medical Asssociation.

DUES FOR 1906.

It is to be hoped the affiliated societies will make an effort to collect the annual dues for 1906 as soon after the first of the year as possible, so that the report of the local societies may be made without the usual delay. We now have nearly 2,000 members and if a concerted action on the part of the officers of county societies is made, probably 500 additional names could be added. There are many physicians in almost every county of the state who would gladly join the local society, thereby becoming members of the State Association and

eligible to membership in the American Medical Association if they were invited. Dues are the same whether members join during the early or latter part of the year.

THE RETIREMENT OF DR. BIDDLE.

The announcement is made in the last number of the *Journal of the Michigan State Medical Society* of the resignation of Dr. A. P. Biddle, secretary of that society, and editor of the journal. Dr. Biddle resigns owing to increased demands of work along other lines. The Michigan State Medical Society has accepted the resignation, to take effect January 1st, and voices its regret at Dr. Biddle's resignation, as well as its appreciation for his faithful and energetic services. This sentiment will be echoed by all officers and members of the American Medical Association who have come in contact with Dr. Biddle during the years of his secretaryship. He has always performed the arduous duties of his position cheerfully, promptly and effectively during the time that he has occupied the secretary's office. He has seen the state medical society grow to its present proportions and the *Journal of the Michigan State Medical Society* developed into one of the best state journals in the country. It is to be hoped that Dr. Biddle's retirement from the secretaryship will not mean that he will cease to take an interest in medical organization or to work as earnestly as heretofore, for the good of his state association and of the American Medical Association. —*Journal A. M. A.*

THE GREAT AMERICAN FRAUD, LIQUOZONE.

SAMUEL HOPKINS ADAMS.

Twenty years ago the microbe was making a great stir in the land. The public mind, ever prone to exaggerate the importance and extent of any new scientific discovery, ascribed all known diseases to microbes. The infinitesimal creature with the mysterious and unpleasant attributes became the leading topic of the time. Shrewdly appreciating this golden opportunity, a quack genius named Radam invented a drug to slay the new enemy of mankind, and gave it his name. "Radam's Microbe Killer" filled the public prints with blazonry of its lethal virtues. As it consisted of a mixture of muriatic and sulphuric acids with red wine, any microbe which took it was likely to fare hard; but the ingenious Mr. Radam's method of administering it to its intended prey, via the human stomach, failed to commend itself to science, though enormously successful in a financial sense through flamboyant advertising.

In time, some precocious bacillus, having eluded the "killer," carried off its inventor. His nostrum soon vanished. Today it is little heard of, but from the ashes of its glories has arisen a mightier successor, "Liquozone." Where twenty years ago the microbe reveled in publicity, today we talk of germs and bacteria; consequently Liquozone exploits itself as a germicide and bactericide. It is dispensed with the red wine of the Radam concoction, and relies on a weak solution of sulphuric and sulphurous acids, with an occasional trace of hydrochloric or hydrobromic acid. . . . . Yet the Liquizone com-

pany is not a patent medicine concern. We have their own word for it.

"We wish to state at the start that we are not patent medicine men, and their methods will not be employed by us. Liquozone is too important a product for quackery."

The head and center of this non-patent-medicine cure-all is Douglas Smith. Mr. Smith is by profession a promoter. He is credited with a keen vision for profits. Several years ago he ran on a worthy ex-piano dealer, a Canadian by the name of Powley (we shall meet him again, trailing clouds of glory in a splendid metamorphosis), who was selling with some success a mixture known as "Powley's Liquified Ozone." This was guaranteed to kill any disease germ known to science. Mr. Smith examined into the possibilities of the product, bought out Powley, moved the business to Chicago, and organized it as the Liquid Ozone Company. Liquid air was then much in the public prints. Mr. Smith, with the intuition of genius, and something more than genius' contempt for limitations, proceeded to catch the public eye with this frank assertion: "Liquozone is liquid oxygen—that is all."

The object of the compact was not to make money, but to succor the sick and suffering. They say so themselves in their advertising. For some reason, however, the business did not prosper as its new owner had expected. A wider appeal to the sick and suffering was needed. Claude C. Hopkins, formerly an advertising manager for Dr. Shoop's Restorative (also a cure-all), and perhaps the ablest exponent of his specialty in the country, was brought into the concern, and a record-breaking campaign was planned. This cost no little money, but the event proved it a good investment. President Smith's next move showed him to be the master of a silver tongue, for he pursuaded the members of a very prominent law firm who were acting as the company's attorneys, to take stock in the concern, and two of them to become directors. These gentlemen represent, in Chicago, something more than the high professional standing of their firm; they are prominent socially and forward in civic activities; in short, just the sort of people needed by President Smith to bulwark his dubious enterprise with assured respectability.

In the Equitable scandal there has been plenty of evidence to show that directors often lend their names to enterprises of which they know practically nothing. This seems to have been the case with the lawyers. One point they brought up: was liquozone harmful? Positively not, Douglas Smith assured them. On the contrary, it was the greatest boon to the sick in the world's history, and he produced an impressive bulk of testimonials. This apparently satisfied them; they did not investigate the testimonials, but accepted them at their face value. They did not look into the advertising methods of the company; as nearly as I can find out, they never saw an advertisement of liquozone in the papers until long afterward. They just became stockholders and directors, that is all. They did as hundreds of other upright and well-meaning men had done, in lending themselves to a business of which they knew practically nothing.

While the lawyers continued to

practice law, Messrs. Smith and Hopkins were running the Liquozone Company. An enormous advertising campaign was begun. Pamphlets were issued containing testimonials and claiming the soundest of professional backing. Indeed, this matter of expert testimony, chemical, medical and bacteriologic is a specialty of liquozone. Today, despite its reforms, it is supported by an ingenious system of pseudo-scientific charlatanry. In justice to Mr. Hopkins, it is but fair to say that he is not responsible for the basic fraud; that the general scheme was devised, and most of the bogus or distorted medical letters arranged, before his advent. But when I came to investigate the product a few months ago, I found that the principal defense against attacks consisted of scientific statements which would not bear analysis, and medical letters not worth the paper they where written on. In the first place, the liquozone people have letters from chemists asseverating that the compound is chemically scientific. . . .

(Mr. Adams goes on to say that, on investigation, he found that the technical indorsement obtained by this company, when analyzed, failed to bear out the claims of liquozone as a medicine. Inquiries conducted along medical lines revealed the fact that the published indorsements were either misstatements or a garbled version of what really had been written about liquozone. One physician, a hospital interne, who was paid to make bacteriologic tests of the germicidal power of liquozone, stated that it had shown such powers, but that the product was worthless medicinally. The last half of his report was suppressed; only the first half was printed under the designation of "Report made by the ———— Hospital." Another statement was said to have been published by a Dr. "W. H. Myers in the New York *Journal of Health*. Dr. Myers and that journal, Mr. Adams says, are purely fictitious. Another testimonial purporting to come from a physician was found to have been written by a veterinary surgeon. The Suffolk Hospital and Dispensary in Boston, through its president, Mr. Smith, testified in glowing terms to the remedial value of liquozone, but the hospital medical authorities know nothing of liquozone and never prescribed it. One testimonial was found to be genuine, having been written by a "cancer-cure" specialist, who stated that the letter was "not solicited." Letters addressed by Mr. Adams to various institutions in Chicago elicited the information that it either had never used or that it had been experimented with for external application or that a few private patients had purchased it, but on no recommendation from the physicians. Attempts made personally to peruse the "overwhelming number of medical indorsements" failed, the officials of the company claiming that these indorsements were "in the press" and could not be shown.)

. . . In a pamphlet issued by the company, and since withdrawn, occurs this sprightly sketch:

"Liquozone is the discovery of Professor Pauli, the great German chemist, who worked for twenty years to learn how to liquefy oxygen. When Pauli first mentioned his purpose, men laughed at him. The idea

of liquefying a gas—of circulating liquid oxygen in the blood—seemed impossible. But Pauli was one of those men who set their whole hearts on a problem and followed it out either to success or the grave. So Pauli followed out this problem, though it took twenty years. He clung to it t h r o u g h discouragements which would have led any lesser man to abandon it. He worked on it despite poverty and ridicule," etc.

Alas for romance! The scathing blight of the legal mind descended on this touching story. The lawyer-directors would have none of "Professor Pauli, the great German chemist," and liquozone destroyed him, as it had created him. Not totally destroyed, however, for from those rainbow wrappings, now dissipated, emerges the humble but genuine figure of our old acquaintance, Mr. Powley, the ex-piano man of Toronto. He is the prototype of the Teutonic savant. So much the liquozone people now admit, with the defense that the change of Powley to Pauli was, at most, a harmless flight of fancy, "so long as we were not attempting to use a name famous in medicine or bacteriology in order to add prestige to the product." A plea which commends itself by its ingeniousness at least. . . . Just as to peruna all ills are catarrh, so to liquozone every disease is a germ disease. Every statement in the new prospectus of cure "has been submitted to competent authorities, and is exactly true and correct," declares the recently issued pamphlet, "Liquozone, the Tonic Germicide," and the pamphlet goes on to ascribe, among other ills, asthma, gout, neuralgia, dyspepsia, goiter, and "most forms of kidney, liver and heart troubles" to germs. I don't know just which of the eminent authorities who have been working for the Liquozone Company fathers this remarkable and epoch-making discovery. It might be Professor Pauli, or perhaps the sulphuric-acid-proof firm of Dickman & Mackenzie. Whoever it is ought to make the definite facts public in the interests of humanity as well as their own. Monuments of discarded pill boxes will celebrate the liquozone savant who has determined that dyspepsia is a germ trouble. The discovery that gout is caused by the bite of a bacillus, and not by uric acid, is almost as important an addition to the sum of human knowledge as the determination of a definite organism that produces the twinges of neuralgia, while the germ of heart disease will be acclaimed with whoops of welcome from the entire medical profession. The old claim is repeated that nothing enters into the production of liquozone but gases, water and a little harmless coloring matter, and that the process requires large apparatus and from eight to fourteen days' time. I have seen the apparatus, consisting of huge wooden vats, and can testify to their impressive size. And I have the assurance of several gentlemen whose word (except in print) I am willing to take, that fourteen days' time is employed in impregnating every output of liquid with the gas. The result, so far as can be determined chemically or medicinally, is precisely the same as could be achieved in fourteen seconds by mixing the acids with the water.

The product is still sulphurous and sulphuric acid heavily diluted, that is all. . . .

(Mr. Adams further states, that of the chemists and bacteriologists employed by the Liquozone Company, there is not one who will risk his professional reputation on the simple and essential statement that liquozone taken internally kills germs in the human system. Under the direction of Mr. Adams, and in the presence of Dr. Gradwohl, representing the Liquozone Company, a series of guinea-pig tests was made by the Lederle Laboratories. The result was that liquozone was found to have absolutely no curative effect, but did, when given in pure form, lower the resistance of the animals which had been inoculated with anthrax, diphtheria and tuberculosis, so that they died a little earlier than those not treated. Dr. Gradwohl was satisfied of the fairness of the tests and declared that, in his opinion, the tests had proved the total ineffectiveness of liquozone as an internal germicide. Mr. Adams says that these experiments showed further that liquozone may decrease the chances of the patient's recovery with every dose that is swallowed, but certainly would not increase them. Mr. Adams continues as follows):

Since the announcement of this article, and before, *Collier's* has been in receipt of much virtuous indignation from a manufacturer of remedies which, he claims, liquozone copies. Charles Marchand has been the most active enemy of the Douglas Smith product. He has attacked the makers in print, organized a society, and established a publication mainly devoted to their destruction, and circulated far and wide injurious literature (most of it true) about their product. Of the relative merits of "hydrozone," "glycozone," (Marchand's products), and "liquozone," I know nothing; but I know that the Liquozone Company has never in its history put forth so shameful an advertisement as the one produced on this page (which appeared in the JOURNAL September 23, 1905, p. 936) signed Marchand, and printed in the *New Orleans States*, when the yellow fever scare was at its height.

And hydrozone is an "ethical" remedy; its advertisements are to be found in reputable medical journals. —Excerpts from *Collier's Weekly*, November 18, 1905.—*Journal A. M. A.*

OBITUARY.

Dr. Peter J. Kirschner died at his home in St. Joseph on September 22. Dr. Kirschner was one of St. Joseph's leading practitioners, having served as county physician in 1880–81, as coroner from 1882 to 1886, and was again county physician in 1889, serving until 1891. He was elected Mayor of St. Joseph in 1898, filling the highest position in the gift of our citizens with honor. Dr. Kirschner was born near St. Joseph, June 13, 1853, attending the public schools of that city until he reached the age of seventeen, then going to Cincinnati for two years, where he pursued his studies. Returning to St. Joseph he read medicine in the office of Dr. Jacob Geiger. He attended the Louisville University in 1877, and was graduated from Bellevue in 1879.

COUNTY SOCIETY NOTES.

ATCHISON COUNTY MEDICAL SOCIETY.

Dr. W. G. Safford, President.
Dr. Austin McMichael, Secretary.

Atchison County Medical Society held a meeting on October 10th, at which time the society was reorganized and a constitution and by-laws adopted in accordance with the state and national societies. The following officers were elected for the ensuing year: President, W. G. Safford; vice-president, G. W. Lott; secretary, Austin McMichael; treasurer, S. D. Smith; reporter, J. A. Postlewait.

The future of the society seems well assured, and good work is expected from all of the members.

AUSTIN MCMICHAEL, Secretary.

BUTLER COUNTY MEDICAL SOCIETY.

Dr. W. A. Kendall, President.
Dr. J. J. Norwine, Secretary.

Butler County Medical Society convened in the City Hall at Poplar Bluff on November 9th, with a large attendance of the members.

Most of the evening was taken up in the discussion of a report by Dr. Detweiler, on a specimen taken from the throat of a child said to have true diphtheria. Some fifty cases of the disease had occurred in Butler county within the past two months, with one death, although antitoxin was used in only one case. The patients usually recovered in about a week, without constitutional symptoms or sequelæ.

Dr. Norwine reported a case of sporadic yellow fever occurring in the cool days of September, in Poplar Bluff. The report was freely discussed by the members.

J. J. NORWINE, Secretary.

CLINTON COUNTY MEDICAL SOCIETY.

Dr. John Sturgis, President.
Dr. E. A. Colley, Secretary.

The Clinton County Medical Society met in Plattsburg November 7th, with a fair attendance. The society was called to order by the president, Dr. Sturgis. Minutes of the last meeting were read and approved.

Dr. John Kay reported an interesting case of confinement in which the patient, a multipara with no previous history of trouble, after labor had begun developed an edematous stenosis of the vagina and cervix, associated with a prolapse of the vagina, which was noticed upon the first examination. The head of the child was greatly extended with an effusion, though the head had not engaged. The application of forceps was made almost impossible, as they could not be made to reach the bony part of the head, owing to the great amount of effusion present. Upon delivery, the body of the child was found to be swollen. This case was discussed by several members, but the condition could not be accounted for.

The following committees were appointed:

Drs. P. M. Steckman and E. A. Colley, to examine the records of the physicians practicing in Clinton county, and report at next meeting.

Drs. John Kay and G. B. Rush, to arrange for the entertainment of the society, December 5th.

Drs. John Sturgis, Robert W. Rea and P. M. Steckman, to arrange program for January 2d, 1906.

The society adjourned to meet in Plattsburg, December 5th.

E. A. COLLEY, Secretary.

COOPER COUNTY MEDICAL SOCIETY.

Dr. P. L. Hurt, President.
Dr. John R. Lionberger, Secretary.

The Cooper County Medical Society met in regular monthly session at the W. O. W. rooms, in Boonville, November 7th.

The meeting was called to order by Dr. F. R. Smiley, vice-president. Members present: Drs. F. R. Smiley, R. L. Evans, John R. Lionberger, W. H. Reynolds and J. T. Taylor.

On account of the condition of the roads, due to the recent severe rains, many of the members living in the county were unable to be present, and so informed the secretary.

The minutes of the previous meeting were read and approved.. On motion the society then adjourned to the offices of Dr. R. L. Evans, as being a more convenient place on account of the number present.

The regular program was dispensed with in order to discuss the report of the committee on fees. The committee had prepared a tabulated list of "fees," and offered it for discussion and comment. The secretary was ordered to make copies of the list and to distribute them among the members, in order that the society might take some definite action upon this subject at its next regular meeting.

There being no further business, the society adjourned to meet Tuesday, December 5th.

JOHN R. LIONBERGER, Secretary.

GASCONADE-MARIES-OSAGE COUNTY MEDICAL SOCIETY.

Dr. J. J. Ferrell, President.
Dr. J. W. Nieweg, Secretary.

The Gosconade-Maries-Osage County Medical Society met in the office of Dr. J. D. Seba, October 26th. The society was called to order by the vice-president, Dr. W. R. Ferrell. Clinics were presented by Drs. I. M. Owens, J. D. Seba and W. R. Ferrell. The minutes of the previous meeting were then read and approved.

Dr. W. S. Allee, of Olean, read a paper entitled "The Treatment of Appendicitis Other Than Surgical." Discussed by Drs. J. D. Seba, J. W. Nieweg, F. DeVilbiss, I. M. Owens, Leslie W. R. Ferrell and J. J. Ferrell.

Dr. J. D. Seba presented an interesting case of spina bifida that he had operated on when the child was but a few hours old.

The society then adjourned for luncheon, given by Dr. Seba. Immediately after reconvening, Dr. J. W. Nieweg read a paper entitled, "Some Remarks on the Insidiousness of Typhoid Fever." Discussion by Drs. Allee, Seba, Owens, Leslie, DeVilbiss and W. R. Ferrell.

Dr. J. D. Seba read a paper entitled, "What Are the Functions of the Thyroid Gland?" This paper was discussed by Dr. Owens.

Dr. J. J. Ferrell read a paper entitled "Bronchial Pneumonia." Those taking part in the discussion on this paper were Drs. DeVilbiss, Allee, Nieweg and J. D. Seba.

The secretary-treasurer made his report, which showed a balance of $5.37 in the treasury. On motion, the report was adopted.

Drs. Allee and W. R. Ferrell were appointed to act with Dr. Seba as censors on the applications of Drs. F. Aufder Heide, J. W. Burgess, W. E. Seba and J. J. Radamacker. All were recommended and elected to membership.

It was moved and carried that Drs. I. M. Owens and F. DeVilbiss be elected honorary members.

It was moved and carried to hold the next meeting at Belle. The society then adjourned to partake of the banquet prepared by the doctors of Bland. After the banquet the following officers were elected for the ensuing year: President, J. J. Ferrell; vice-president, W. R. Ferrell; secretary-treasurer, J. W. Nieweg; censor, J. W. Burgess.

Dr. J. D. Seba was appointed to read a paper on "Spina Bifida," at the next meeting of the State Medical Association, in May, 1906.

Drs. J. W, Burgess, J. J. Radamacker and F. Aufder Heide were appointed on the committee of public health and legislation.

On motion, the society adjourned to meet at Belle on the fourth Thursday in April, 1906.

J. W. NIEWEG, Secretary.

HARRISON COUNTY MEDICAL SOCIETY.

Dr. A. H. Vandivert, President.
Dr. W. H. Wiley, Secretary.

Harrison County Medical Society met at Bethany, November 14th, with the president, Dr. Vandivert, in the chair. The attendance was not as large as had been expected, largely on account of there being considerable sickness in several localities.

It was moved and carried that the regular meetings of the society be held on the third Tuesday in January, April, July and October at Bethany, unless otherwise ordered at subsequent meetings.

Two members were added; namely, Drs. Jas. H. J. Morroway, Ridgeway; and B. M. Sutton, Happy Valley. Dr. Morroway formerly practiced in Iowa. Dr. Wiley was chosen delegate to the state meeting and was also elected reporter for the society. The election of members to represent the society on the program of the State Medical Association was deferred until the next meeting.

Drs. Broyls and Vandivert presented a case of chronic inflammation of the uterus and appendages in a woman sixty-three years of age. The patient was prepared for operation, a trained nurse from Ensworth hospital, St. Joseph, being in attendance, and a combined curettement and ovariotomy was begun. Before the curettement was completed the patient became so weak that the laparotomy had to be postponed. All who attended this clinic admired the work of the trained nurse in the perfect preparation of the patient and the room in which the operation took place. It would seem to be a wise

step for physicians in country districts who do not care to do surgery, to select the most available and best equipped member among them and encourage him by assisting without question or criticism. In this way they would gain for themselves many valuable lessons in surgery which would enable them better to do the emergency work that comes to every country doctor at times. Every physician in the county should be a contributing member of the society, and only sickness in his immediate family should be considered an excuse to remain away from the meetings, for the benefits to be derived from a general participation in the work will prove incalculable by stimulating thought and research in the interim.

W. H. WILEY,
Secretary.

JACKSON COUNTY MEDICAL SOCIETY.

Dr. Robt. T. Sloan, President.
Dr. Max Goldman, Secretary.

The Jackson County Medical Society met in regular session October 12, 1905, the vice-president, Dr. E. H. Thrailkill, in the chair.

The scientific program consisted of a paper by Dr. Ernest F. Robinson, entitled "Spinal Injuries, with Special Reference to the Mechanical and Surgical Treatment." Only the most important topics under the head of spinal injuries were touched upon, such as concussion of the cord, fracture of the spinous processes and arches, compression of the cord, dislocation of vertebræ with and without fracture, and gunshot wounds of the spine. Some stress was laid on the prognosis of spinal injuries, the essayist stating that these were always serious, and that the prognosis should be guarded in every case. He outlined the symptoms of the various injuries, and mentioned a number of conditions complicating them, as hyperpyréxia, profuse perspiration, cystitis, priapism, vesical and rectal interferences when pressure on the cord existed, atrophy of muscles, bed sores from pressure, etc.

As regards the treatment of fracture and dislocation of the vertebræ, extension and counter extension and manipulation were recommended; a general anesthetic should be employed, the condition carefully examined, and immediate treatment instituted. In cases of marked deformity, excepting when severe shock is present, operation should be advised. However, operative treatment, both in cases of pressure on the cord from dislocation of vertebræ and in gunshot wounds of the cord, has proved unfavorable as to results; nevertheless, operative interference should be advised whenever there are symptoms of compression after spinal injuries.

The doctor reported several cases of spinal fracture and dislocation in which encouraging results were obtained by manipulation and extension with fixation; also a case of gunshot wound of the cord, in which the bullet was located by means of the Rœntgen rays and subsequently removed. The patient is now under observation.

Dr. E. von Quast opened the discussion. In reference to prognosis, he said that one is often able to give an encouraging prognosis, and related a case, in which after more than a year of paralysis from spinal injury,

some improvement followed the relief from pressure after laminectomy. A very important consideration, he said, was the time to operate; while every case was a law unto itself, it seemed to him he would always operate and fix early.

Others taking part in the discussion were Drs. R. McE. Schauffler, A. E. Hertzler, G. O. Coffin, M. M. Edmonson, S. Grover Burnett and C. S. Merriman. Dr. Robinson closed the discussion.

MEETING OF OCTOBER 26TH.

The scientific program consisted of a paper by Dr. Carl Sandzen, entitled "The Nauheim Treatment of Heart Diseases," and the presentation of a new instrument, and exhibition of a patholigical specimen by Dr. A. H. Cordier.

Dr. Sandzen's paper consisted, in a general way, of a description of the passive and resistance movements, and of the natural and prepared, or artificial, baths originated by Dr. Schott, of Nauheim, in the treatment of cardiac dilatation and valvular lesions. The doctor demonstrated the movements which he described, and emphasized the importance of properly and scientifically following the directions recommended. He called the movemonts "resistance gymnastics." The baths, he asserted, were of great value, and required the attention of an experienced physician or nurse; if not properly given, they would prove not only of little benefit, but possibly harmful. Plain or carbonated water could be used, and the percentage of the gas, as well as of the salines, could be made to vary with the condition of the patient and the effects desired by the attendant. The temperature of the waters, length of time of the baths, and various formulæ for bath-waters, and formulæ for use at homes, were also considered. Success in the treatment of heart diseases by resistance movements, plus the Nauheim baths, was due to the relief to the laboring heart afforded by the dilatation of the vessels at the periphery, thus lessening peripheral resistance, at the same time increasing the arterial tension and contractile power of the heart; such changes in the circulation were followed by beneficial results.

The paper was thoroughly discussed by Drs. R. O. Cross, Franklin E. Murphy, K. B. Richardson, B. C. Hardin and D. R. Porter. Dr. Sandzen closed the discussion.

Dr. Cordier presented before the society his Murphy button obturator and applicator, a description of which appeared in the *Journal A. M. A.*, Volume XLV., No. 12. The doctor added to the interest in his new instruments by demonatrating upon a section of intestine the ease and simplicity of their practical application. They are undoubtedly of great value, and are ingenious additions to the now almost indispensable Murphy button.

The specimen exhibited by Dr. Cordier was a huge fibromyoma which he had removed on that day; it had been associated with a cystic mastitis of long standing. In this neoplasm could be demonstrated nearly every variety of myoma. From the history of the case one was impressed with the futility of curettage in these cases, and that nothing short of a hysterectomy could offer permanent relief from the condition presented. Drs. Howard

Hill and Herman E. Pearse discussed the cases and Dr. Cordier closed the discussion.

New members received: Calvin Atkins, Independence, Mo.; Walter M. Cross, 1005 Campbell street; James J. Clausen, 2311 Summit street; Chas. B. Irwin, 436 New Ridge Building; E. K. Krimminger, Independence, Mo.; George A. King, 400 Altman Building.

The society adjourned to meet on November 9th.

MAX GOLDMAN, Secretary.

JEFFERSON COUNTY MEDICAL SOCIETY.

Dr. W. H. Farrar, President.
Dr. H. Will Elder, Secretary.

The Jefferson County Medical Society met in DeSoto on October 24th, Dr. W. H. Farrar, the president, in the chair. Papers were read by Drs. A. H. Hamel, Frank Long and R. E. Donnell. A general discussion by all members followed the reading of these papers.

H. W. ELDER, Secretary.

LAFAYETTE COUNTY MEDICAL SOCIETY.

Dr. P. S. Fulkerson, President.
Dr. C. T. Ryland, Secretary.

Lafayette County Medical Society met in regular session at Odessa on Nobember 14th, with a good attendance of members. Dr. W. C. Goodwin was made chairman in the absence of the president, who was kept away on account of sickness in his family.

The following new members were elected: Drs. J. E. Tucker, Lexington; E. F. Gaines, Bates City; Frank McGinnis, Higginsville.

Drs. W. A. Braecklein, R. C. Carter and W. D. Barclay, were appointed a committee to draw up resolutions on the death of Dr. W. A. Blakely, who died at Higginsville on October 18th.

Dr. Braecklein suggested that the committee on legislation be urged to look after any illegal and unregistered practitioners in the county and to push the prosecution of such persons.

Dr. J. H. George read a splendid paper on "Diphtheria." As usual this subject brought forth a great deal of interesting and helpful discussion from all present.

Election of officers for the ensuing year was next in order and resulted as follows: President, Dr. P. S. Fulkerson, Lexington, re-elected; first vice-president, Dr. W. C. Goodwin, Odessa; second vice-president, Dr. W. A. Braecklein, Higginsville; secretary and treasurer, Dr. C. T. Ryland, Lexington.

The chairman appointed Drs. W. G. Harwood, G. W. Fredenall, Geo. Williams and W. C. Goodwin to prepare papers for the program of the next regular meeting.

Adjourned to meet in Higginsville on the second Tuesday in January, 1906. C. T. RYLAND, Secretary.

MARION COUNTY MEDICAL SOCIETY.

Dr. R. H. Goodier, President.
Dr. F. Janet Reid, Secretary.

The regular meeting of Marion County Medical Society was held at Hannibal on November 3d, the president, Dr. R. H. Goodier, in the chair. The attendance was fairly good.

Subject for the evening, "Pelvic

Infections." Dr. E. H. Bounds opened the discussion and was followed by other members.

Dr. W. H. Hays reported a case of a child seven months old who had an attack of infantile diarrhea, followed by intussuseption. Operation was advised but declined by the parents. Death supervened but no post mortem was made.

The committee on Scientific Communications reported the subjects, together with the names of those who are to open the discussions for the succeeding seven months as follows:

December, 1905, "Relations of Membranous Croup and Diphtheria," Dr. R. Schmidt; January, 1906, "Diseases of the Gall-Bladder," Dr. T. Chowning; February, "La-Grippe," Dr. Primm; March, "Pneumonia," Dr. Hays; April, "Headaches," Dr. Reid; May, "Malaria," Dr. Chilton; June, "Syphilis," Dr. Farrell.

The next regular meeting will be held on the first Friday evening in December. H. L. BANKS, Reporter.

NEWTON COUNTY MEDICAL SOCIETY.

Dr. J. W. Lamson, President.
Dr. Horace Bowers, Secretary.

The regular monthly meeting of Newton County Medical Society was called to order by the president on November 14th, twelve members being present. The members are greatly interested in the work of the society and each is doing his best to make it a success. At this meeting there was quite a lengthy discussion on the subject of diphtheria, of which there have been quite a number of cases in the county.

The subject of fees was also brought up for discussion, and from the interchange of opinions among the members it is hoped a standard of fees will be established.

Special efforts are being made to have the next meeting a very interesting one.

HORACE BOWERS, Secretary.

PEMISCOT COUNTY MEDICAL SOCIETY.

Dr. J. B. Luten, President.
Dr. John Johnson, Secretary.

Pemiscot County Medical Society met at Hayti, November 7th, and was called to order by the president, Dr. B. D. Crowe. The minutes of the last meeting were read and approved.

The scientific program consisted of a paper by Dr. B. D. Crowe, entitled "Gonorrheal Arthritis." The paper was freely discussed by all members present.

The following officers were elected for the year 1906: President, J. B. Luten; vice-president, A. R. Conrad; secretary and treasurer, John Johnson; reporter, B. D. Crowe; delegate, M. D. Hendrix.

The scientific program for the next meeting will be as follows: Dr. H. F. Mays, "Diphtheria and Scarlet Fever;" Dr. C. E. Martin, "Anesthesia;" Dr. G. W. Phipps, "Duties of the Members of the Society to Society." J. B. LUTEN, Secretary.

PLATTE COUNTY MEDICAL SOCIETY.

Dr. R. P. Davis, President.
Dr. G. C. Coffey, Secretary.

The regular monthly meeting of Platte County Medical Society was

held in Platte City, November 1st, the following physicians being present: Drs. H. H. Patterson, J. A. Baldwin, A. C. Barr, Alva Naylor, Spence Redman, R. P. Davis, R. P. C. Wilson and G. C. Coffey.

Dr. A. C. Barr, of Linkville, read a paper upon "Diagnosis." He said we should recognize symptoms and conditions and give remedies to suit them, rather than giving remedies for our diagnosis. A hurried diagnosis with regard to the symptoms is wrong and very detrimental to the patient. This paper brought forth a liberal discussion from several members present.

Dr. Spence Redman read a paper entitled "The Treatment of Appendicitis; When Surgical, When Medical." This paper dealt very fairly with the subject, and brought out the opinion of every one present in the discussion which followed.

Dr. R. P. Davis, of Woodruff, was selected to prepare a paper for the next meeting of the State Society at Jefferson City in May, 1906.

Applications for membership were received from Dr. Alva Naylor, of Platte City, and Dr. Virgil Morrison, of Iatan.

A general business meeting and discussion was then held. The committee on public health and legislation was given the names of several illegal practitioners who were practicing in the county, and instructed to bring action against them.

The secretary was instructed to mail to every member of the society a copy of the "Principles of Medical Ethics" of the American Medical Association.

Adjourned to meet in Platte City the first Wednesday in December.

G. C. COFFEY, Roporter.

PULASKI COUNTY MEDICAL SOCIETY.

Dr. W. L. Ragan, President.
Dr. G. W. Orrick, Secretary.

The Pulaski County Medical Society met in regular session Monday, November 6th, at Waynesville. The meeting was well attended and an excellent program was rendered.

The society adjourned to meet at Dixon the first Monday in February.

G. W. ORRICK, Secretary.

WORTH COUNTY MEDICAL SOCIETY.

Dr. O. H. P. Mills, President.
Dr. J. K. Phipps, Secretary.

The regular monthly meeting of Worth County Medical Society was held at Grant City, November 8th, the president, Dr. Mills, in the chair. Minutes of the last meeting were read and approved.

Dr. John Andrews presented a paper on "Pulmonary Hemorrhage," which was discussed by all the members.

The president reported a case of leukemia in a girl aged nineteen, which terminated fatally in twenty-four days. The case was considered as belonging to the mixed type of this affection, the lymphatics, spleen and bone marrow all being involved in the pathologic process. The microscopic findings, as exhibited by Dr. H. P. Mills were very interesting. There was a true leucocytosis, with one leucocyte to about five erythrocytes, instead of one to five hundred or six hundred as in normal blood. Hemoglobin was reduced to below 40 per cent. before death. Dr. Mills thought this case argued in favor of the

theory of the infectious origin of leukemia. There was a chill, fever, profound toxemia and a faithful picture of an acute infectious disease.

The next meeting will be held the second Wednesday in December.

J. K. PHIPPS, Secretary.

WAYNE COUNTY MEDICAL SOCIETY.

Dr. J. P. Sebastian, President.
Dr. R. J. Owens, Secretary.

The Wayne County Medical Society met at Piedmont on November 10th, the president, Dr. J. P. Sebastian, in the chair. Minutes of the last meeting were read and approved.

Dr. Hale, of Greenville, read a paper on "Puerperal Eclampsia" and reported a case. The paper was discussed by a number of the members.

Pneumonia was the subject for general discussion and remarks were made by Drs. Sebastian and Bates. Dr. Bates said he aborted the disease with large mustard draughts applied to the chest. There was some discussion in regard to uniformity of a fee bill. The practice of midwifery without license was also brought up for discussion, but no definite action taken.

The meeting adjourned to meet at Greenville on the second Friday in December.

R. J. OWENS, Secretary.

NEWS ITEMS.

The Chillicothe Post Graduate Medical Society is now a good working body. Nearly all the active members of the profession in Chillicothe are members of this society and the good effects of such an organization are apparent to all who have joined the movement.

An interesting session was held on November 16th. Dr. J. F. Cherrington spoke on the subject of appendicitis, and all the members present took part in the discussion.

The Grand River Medical Society will meet in Chillicothe on December 7th. This is one of the oldest medical societies in North Missouri. It is composed of members living in the counties of Livingston, Linn, Caldwell and Daviess. Meetings are held yearly and are always well attended. Dr. Goins of Breckenride is secretary.

The annual meeting of Livingston County Medical Society will be held on the second Wednesday in January, 1906. At present the meetings are held quarterly, but in January an effort will be made to arrange for monthly meetings.

Dr. H. D. Quigg, Blackwater, Mo., has been very sick, suffering from an attack of typhoid fever. At last report the doctor was rapidly convalescing and well on the road to recovery. Dr. Quigg represents Cooper county in the State Legislature, and was instrumental in securing the passage of the "tuberculosis sanitarium law."

Dr. John R. Lionberger, of Boonville, has been appointed local surgeon for the Missouri Pacific railroad at Boonville, succeeding Dr. R. H. Holman, resigned.

The Atlanta School of Medicine, Atlanta, Ga., opened on October 3d, in its temporary quarters in the Masons' Annuity building with the following faculty: Dr. Howard J. Williams, Dr. William S. Kendrick, Dr. Charles D. Hurt, Dr. George H. Noble, Dr. James M. Crawford, Dr. Edward C. Davis, Dr. Luther C. Fiscer, Dr. Edward G. Jones, proctor of the faculty; Dr. Frank K. Boland, Dr. Hansell Crenshaw, Dr. Stewart R. Roberts, Dr. James L. Campbell, Dr. William L. Champion, Dr. Robert B. Ridley, Jr., Dr. L. Benjamin Clarke and Dr. James H. Crawford.

D. Appleton & Co., of New York, have issued a catalogue of medical books published by them. It contains sixty-four pages, with illustrations from the various books mentioned, the titles of the books, prices and specimen pages. The catalogue will be sent free to any physician making request.

Estimates based upon reports made by students who have entered the physical training department of Missouri University, indicate that in this state at least one person in eight has typhoid fever before he is twenty years of age. Even among the football men, who represent the healthiest type, five of forty-four report an attack of the disease. No other malignant disease is so common.

Dr. C. W. Hetherington, physical director, says this is an unusual condition as compared with other states. The most startling thing about these figures is, that they indicate something radically wrong in sanitary conditions. Dr. A. W. McAlester, dean of the medical department, says that in a large majority of the cases, properly investigated, typhoid fever has been traced to a polluted water supply.

I am pleased to announce that final arrangements have been perfected for the tour of the American party to the International Medical Congress at Lisbon, April, 1906.

The party will sail on Saturday, April 7, on the North German Lloyd steamer *Koenig Albert*, for Gibraltar, visiting Algerciras, Seville, Cordova, etc.; spend a week in Lisbon during the congress, and returning to New York on Wednesday, May 9. The trip may be made comfortably in a first-class steamer both ways, all expenses paid, including board and lodging while in Lisbon, and entertainment at other points, for $300.

A number of side trips are being added, and ticket will be good returning through Europe, if desired, at a slightly increased cost.

Following is a list of those who have joined the party:

Lewis S. McMurtry, M. D., Louisville.

Nicholas Senn, M. D., Chicago.

J. D. Griffith, M. D., Kansas City, Mo.

W. F. Southard, M. D., San Francisco.

Frank P. Norbury, M. D., Jacksonville, Ill.

W. T. Corlett, M. D., Cleveland, Ohio.

C. H. Hughes, M. D., St. Louis, Mo.

R. T. Morris, M. D., New York City.

A. Vander Veer, M. D., Albany, N. Y.

Jos. M. Mathews, M. D., Louisville.

J. B. Murphy, M. D., Chicago.

Fenton B. Turck, M. D., Chicago.

Jas. E. Moore, M. D., Minneapolis, Minn.

Ramon Guiteras, New York City.

Dr. John H. Musser, Philadelphia, is chairman of the national American committee, and Dr. Ramon Guiteras (75 West Fifty-fifth street, New York City) is the secretary, to whom all applications for membership and communications in regard to the presentation of papers should be addressed.

All those who contemplate the trip are cordially urged to make reservation at once in order to secure desirable berth on the steamer and good hotel accommodations. Program of the itinerary upon request. Address

DR. CHAS. WOOD FASSETT,
St. Joseph, Mo.

Dr. George M. Gould, 1722 Walnut street, Philadelphia, will be grateful for any trustworthy information as to the methods which have been devised by the blind in overcoming their disability or in gaining a livelihood. Accounts of such lives, anecdotes, references to literature, etc., will be appreciated.

The next regular meeting of the Cass County Medical Society will be held at Harrisonville, December 7, 1905, at 1:30 P. M. The program is as follows:

Paper, "Chloroform in Labor," by Dr. T. W. Adair. Paper, "The Physician as a Business Man," by Dr. W. F. Chaffin. Paper, "The Diagnosis of Typhoid Fever," by F. W. Foster. Paper, by Dr. R. P. Walker. Address, by the retiring president, Dr. R. D. Ramey. Quiz, "Fractures and Dislocations of Radius and Ulna," by Dr. A. R. Elder. Election of officers for ensuing year.

This is our annual meeting. Let every member so arrange his work that he may help to make a record-breaking attendance. Remember the date. DR. J. S. TRIPLETT, Secretary.

ABSTRACTS.

Curability of Tabes.—The writer points out the contradictory opinions which exist with regard to the curability of tabes. Some authorities, such as Babinski and Lerredde, maintain that it is curable by intense mercurial treatment; while others, including Fournier and most of the neurologists, hold a contrary opinion. The writer attempts to reconcile these views as follows: 1. The variety in tabetics is such that often they cannot be compared, and hence give different results with the same treatment. Also observations made on analogous cases treated by different mercurial methods give different results, and even also with the same mercurial treatment. 2. The toleration of mercury varies with the condition of the patient, earlier stages of the disease and younger patients supporting it best. 3. Mer-

cury gives different results according to the dose and method of administration. Inunction is uncertain; injection of insoluble salts is also uncertain and may lead to accidents; soluble salts are the best for injection, as they are more under control. 4. The result varies from cure to aggravation of symptoms, according to the care exercised in treatment and according as the case is more or less favorable. Mercurial treatment well carried out may arrest the disease or lessen its severity sufficiently for the patient to go about his business. But work should be reduced and the periods of treatment and repose should be annual and prolonged. Mercurial treatment badly carried out may aggravate the disease, or even cause new symptoms which persist afterward. By careful proportion of the dose to the patient's strength the maximum useful effect may be obtained without fatigue or malaise. 5. Some cases get worse under the most careful treatment, and probably syphilis does not play an equal part in all cases. Certain lesions are cicatricial, and are not affected by mercury, while others in the inflammatory stage will react to the drug. The improvement under mercury does not usually prevent the persistence of certain signs, such as modified reflexes; nor further relapses under the influence of overwork, other infections, etc. 6. Mercury is not the only treatment for tabes; the general hygiene is also important, and work should be restricted.

The author concludes that mercury does not cure in all cases of tabes, but under certain conditions gives favorable results. The contradictory accounts given by different observers are due to the complexity of the cases and to the different methods of treatment. It is an error to give massive doses of mercury to all cases alike, and equally an error not to give it at all. All tabetics should receive mercurial treatment combined with rest, hydrotherapeutics, and re-education of the muscles. The course of tabes is not progressive in all cases, and the author is of the opinion that the classical type described by Duchenne is less common now than formerly. This is probably due to a more general adoption of mercurial treatment.—*Monthly Cyclopedia of Pract. Med.*

Ear Complications of Cerebro-Spinal Meningitis.—Colles (*Medical Record*, September 9, 1905), states that the earlier writers on the subject of cerebro-spinal meningitis, whose observations were made mostly during epidemics in different countries, did not have much to say that was definite or trustworthy concerning any ear complications coming to their notice. The subject was usually dismissed with the remark that the patient became very deaf, or slightly deaf, or that when convalescence set in there was complete deafness present, etc.

A consideration of the aural affection itself and the seat of the lesion showed that opinions varied. It would appear, according to the views of some authorities, that in certain cases an inflammatory lesion at the acoustic center in the brain, or occurring along the course of the nerves of hearing to the auditory foramina through pressure of plastic exudation, might be responsible for the loss of hearing. As evidence, however, that the origin of this affection is not central, Gruen-

ing obtained by electrization the normal reaction of the auditory nerves within the cranium. If the lesion which causes the deafness lies along the course of the auditory nerve within the cranium, the function of the other cranial nerve should be destroyed also. If the inflammation did not invove the labyrinth, but simply damaged the main branches of the auditory nerves, it would be difficult to understand how the trunks of the facials could escape, so intimately related as they are to the former nerves. It is much more probable (and indeed is now generally accepted) that an inflammatory condition of the labyrinth is the causative factor, especially in those cases of profound and lasting deafness. This opinion is borne out by actual post-mortem findings. Klebs states that the mucous lining of the vestibule was detached, the lining membrane of the semi-circular canals was distinctly thickened and loosed, and in the anterior canal there were semifluid purulent masses. Weber-Liel (in 1879) showed that a free communication exists between the endolymphatic and perilymphatic spaces of the labyrinth and the extralabyrinthine intracranial spaces. It is very probable that infection spreads by this route from the meninges to the labyrinth. The inflammatory process extends along the lymph channels of the vestibule and cochlear aqueducts, involving the structures within the bony labyrinth. The composition of the perilymph and endolymph undergoes a change, due to the presence of the specific germ, the blood vessels become dilated and true tissue-hypertrophy takes place from the migration of white blood cells into the surrounding tissues. Owing to these changes in the blood supply, extravasation of blood takes place easily and is often found. The tissues become dense, bone-thickening takes place and often the semicircular canals or cochlea are partially, if not completely, obliterated. In other cases the tissues become necrotic, and we find the labyrinthine structure filled with purulent matter. In some rare instances it has been found that the tympanic cavity has become involved by the purulent process of the internal ear breaking through the oval or round windows. In this manner a purulent otitis media may be established. As far as we know, this form of labyrinthine disease does not differ from that occurring during the course of other epidemic affections, such as scarlet or typhoid fevers, measles, etc.

Another aural affection frequently observed in cases of cerebro-spinal fever is acute inflammation of the middle ear. A mild otitis media is of common occurrence, but usually subsides without any impairment of the hearing power. In some cases a more severe attack of otitis media becomes a suppuration of the middle ear. Moos reported a case of cerebro-spinal mengitis in which decided, if not total, deafness was found two days before death. At the autopsy it was seen that the tympanic mucous membrane on both sides was decidedly hyperemic and swollen. The auditory nerve in the porus acusticus internus was quite free from evidences of inflammation on both sides, and both labyrinths were normal in every respect. Klebs also has reported a similar case, where the deafness be-

gan shortly after the commencement of the illness, becoming complete in a few days. At the post-mortem examination the auditory nerves (examined microscopically) were found perfectly normal, and the terminal apparatus of the cochlea also. Extensive inflammatory changes, however, were found in the middle ear, the cavity being filled with bands of connective tissue traversing it in all directions, greatly impeding the free movement of the ossicles to which they were firmly adherent.

But this affection, while severe in some instances, cannot satisfactorily account for the profound and complete deafness in by far the greater number of cases, nor for the important fact that deafness is almost invariably bilateral. It may not be total when first observed, only partial; but it will usually be found to increase gradually, becoming complete after some days or weeks.

Most of the unfortunates whose hearing is affected become perfectly deaf, and never regain this function. Otalgia, otorrhea and other local symptoms are, for the most part, entirely absent, excepting, perhaps, vertigo and tinnitus. The loss of hearing does not occur at the same period of the disease in all cases. Some patients emerge from the stupor of the disease with good hearing, but lose it during convalescence; but the majority are observed to be deaf as soon as full consciousness returns.

It is difficult to understand how any attack of acute otitis media could cause such profound and complete deafness, and practically all otologists today are united in the opinion that the labyrinth is the seat of the trouble.

The outlook for recovery of the hearing power is a grave one. In some milder cases a certain amount of hearing may remain. In early life, even after the child has learned to speak a few words, the loss of auditory perception renders the patient mute as well as deaf, such words as the child has learned being soon forgotten. Treatment is unsatisfactory, though it is claimed by some that favorable results have been obtained through reduction of the labyrinthine pressure by the use of pilocarpine. The general prognosis is a gloomy one, and any improvement in the hearing, however slight, should be considered most encouraging.

Retroperitoneal Teratoma.—Nicholson (*St. Louis Medical Review*, October 21, 1905). This case of teratoma of the abdominal cavity is remarkable, not only because of its rare occurrence, rapid growth, and total absence of symptoms until three weeks before death, but because within its substance there was found a chorion epithelioma.

On August 5, 1905, I was consulted by C. W., a healthy-looking, well-developed young man, twenty-one years of age, who complained of one symptom—fainting, which had occurred twice during the preceding week. He had attended to his business until August 4th, when he quit work, fearing an accident during his trips as superintendent down into the mine. Upon inspection, the abdomen appeared normal; pressure over the region of the gall-bladder enabled the examining finger to outline a pear-shaped body. In the median line beneath the rectus abdominis, extending

from a point four inches above the pubes to the lower margin of the right lobe of the liver was an immovable mass of definite form. The line of dullness was continuous between the pear-shaped body and the mass in the median line. Although the growth measured four inches in width, no intestinal disturbance had resulted. Three weeks later the patient vomited and complained of great pain after eating. The vomiting became more frequent and the pain more severe with each succeeding day. I saw the patient on September 3d, and on the following morning made an exploratory incision, revealing a growth extending from the right kidney to the last dorsal vertebra, thence downward to within two inches of the pubes. It was firmly attached to the median line posteriorily, and the kidney externally. The posterior peritoneum was cut through and the mass found to be enclosed in a fibrous capsule, which was sewed to the anterior layer of the peritoneum and a portion of the growth removed. The patient sat up at the end of the first week, but continued to complain of great pain. He died two weeks after the operation.

Post-mortem examination was made by my assistant, Dr. S. S. Stahl, whose report, in part, is as fellows: "On opening the cavity of the abdomen and cutting through the posterior peritoneum and transversalis fascia, a fibrous capsule enclosing a semi-solid mass and adherent only in the median line and to the right kidney, was found. Not without much difficulty could the tumor be removed, so intimately was it attached to the structure, anterior to the vertebral column. The abdominal aorta from the first dorsal vertebra to the fourth lumbar was closely attached to the growth. The gall-bladder was distended, evidently due to pressure on the common duct. Neither the lumbar glands nor the kidneys were enlarged, although the right kidney was adherent to the tumor. The liver, though very slightly enlarged, showed evidence of involvement. The heart and pericardium were normal. The lungs contained two or three hundred nodules."

The tumor weighed a little less than two pounds. It was right-angled and lobulated, the lobules being smooth and extending in different directions. On cutting, the tumor was soft, the anterior inferior extremity being partially cystic. Some of the cysts were as large as a hazel nut. The remainder of the growth appeared solid. The outer surface of the tumor was covered with a distinct fibrous capsule. Paraffin section of the Zinker fixed tissue showed a very complicated mass. Portions of organs were found corresponding in embryonic origin to all the germinal layers. Skin, cutaneous organs, central nervous system, peripheral nerves, represented the epiblast. Mucous glands, tubes cysts, with epithelial lining, were indicative of the hypoblast. Bone, cartilage, fibrous tissue, constituted the mesoblastic structure.

BOOK REVIEWS.

Biographic Clinics, Volume 3, Essays concerning the Influence of Visual Function, Pathologic and Physiologic upon the Health of Patients. By George M. Gould, M. D., editor of American Medicine, author of "An Illustrated Dictionary of Medicine, Biology," etc. P. Blakiston's Sons & Co. $1.00.

The author demonstrates the fact that many of the ills of life are due to defective eyesight. That in an examination of 7,166 school children in New York, a total of over 33 per cent. had defects interfering with the pursuit of their studies. In 1,500 consecutive cases analyzed by him 19.3 per cent. had noteworthy morbid digestional effect, 58 per cent. had headaches and 81 per cent. some morbid reflex result. Statistics show that the relation of crime to truancy indicates that some of both may be due to bad eyes. A competent oculist finds the majority of young criminals of the Elmwood Reformatory afflicted with a high degree ametropia, 50 per cent. of chronic epileptics have unsymmetric astigmatism and anisometropia. Much stress is laid on eye strain as a cause of headache and other nervous diseases and how these conditions may be corrected by the wearing of properly fitted glasses.

Another vital problem discussed is that of scoliosis in school children of which 25 per cent. in Europe are so affected and of which the optic and ocular factors are the prime factors in its etiology.

This volume is well written and the subject a practical one discussed in the author's masterly scientific manner. It may be read with profit by both the laity and profession.

Transactions of the Thirty-Eighth Annual Session of the West Virginian State Medical Association contains the following articles: Tuberculosis, The Great White Plague, Dr. G. D. Lind; The Palliative Treatment of Prostatic Hypertrophy, Dr. H. E. Sloan; A Symposium on the Etiology, Pathology, Symptoms and Signs and Treatment of Pneumonia, Drs. S. S. Wade, L. O. Rose, W. W. Tomkins and L. D. Wilson; Appendiceal Abcess, Pathology and Treatment, Dr. S. M. Mason; Diseases of the Kidneys, Dr. M. McNeilan; Rupture of the Bladder, Dr. John R. Cook; Experience with Diphtheritic Antitoxin, Dr. W. H. Sharp.

Transactions of the Maine Medical Association, Vol. 15, Part 2; Fifty-Third Annual Meeting. The following articles are reported: Mechanics of the Pelvic Floor in Relation to Obstetric Injuries and their Repair, by Charles Jewitt, M. D.; Diphtheria and Pharyngitis and their Demands for a Correct Diagnosis, by Benjamine Franklin Makepeace, M. D.; Vesicula Fistula, by H. H. Purinton, M. D.; Post-Mortem Examinations, by H. E. Milliken, M. D.; Urano-Staphylorrhaphy, by Owen Smith, M. D.; Tetanus, by Wallace E. Webber, M. D.; Cerebral Arterio-Sclerosis, by Charles B. Witherle; The Necessity for County Sanatoria for the Treatment of Tuberculosis, by E. H. Bennett, M. D.; Treatment of Cold Abscesses, by Hiram Hunt, M. D.

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Moss, Woodson, Columbia.
Norris, W. A., Columbia.
Noyes, Guy L., Columbia.
Newman, C. W., Hinton.
Richards, T. C., Browns Station.
Sneed, C. M., Columbia.
Thornton, J. E., Columbia.
Wren, J. A., Woodlandville.

BUCHANAN COUNTY (ST. JOSEPH).

P. I. LEONARD, President. CHAS. WOOD FASSETT, Secretary.

MEMBERS.

Bauman, L. C., 4th & Edmond Sts.
Bansbach, J. J., 825 Frederick Ave.
Bell, J. M., 710 Felix St.
Byrne, J. L., Bank of Commerce Bldg.
Campbell, O. B., Hughes Bldg.
Carpenter, S. F., 720 Edmond St.
Deffenbaugh, W. B., 710 Felix St.
Dandurant, L. J., 8th & Felix.
Davis, E. C., 1411 S. 11th St.
Davis, W. B., 513 Francis St.
Donelan, E. A., 622 Francis St.
Doyle, T. H., 107 N. 9th St.
Doyle, J. M., 107 No. 9th St.
Dunsmore, J. M., King Hill Bldg.
Elam, W. T., Logan Blk.
Eliscu, Fred, 523 Felix St.
Fassett, C. W. Krug Park Place.
Farber, M. J., 520½ Francis St.

Flynn, J. H., 2335 So. 6th.
Forgrave, L. R., Logan Block.
Forgrave, H. S., King Hill Block.
French, J. A., 408 S. 8th St.
Fulkerson, P. P., 6th & Francis Sts.
Gebhart, O. C., King Hill Bldg.
Geiger, C. G., 609½ Francis St.
Geiger, Jacob, 613 Francis St.
Graham, J. K., Logan Block.
Gleaves, O. G., 2624 St. Joseph Ave.
Gray, A. L., Moss Bldg.
Good, C. A., King Hill Bldg.
Goetze, W. F., 7th & Edmond Sts.
Heddens, J. W., 614 Francis St.
Hunterson, D. L., Parnell, Mo.
Humfreville, D. L., 513 Francis St.
Haskins, Fred, 11th & Pacific Sts.
Islaub, J. W., 207 S. 14th St.
Kenney, W. L., 6th & Felix Sts.
Kessler, S. F., 202 N. 5th St.
Leonard, P. I., 613 Francis St.
Leonard, J. W., Rock Island Bldg.
Lee, Herbert, 612 Edmond St.
Lechtman, I., 310 S. 9th St.
Morton, Daniel, King Hill Bldg.
McGill, W. J., King Hill Bldg.
McGlothlan, A. B., 6th & Felix Sts.
Morrison, W. S., Rushville, Mo.
Owens, F. C., Agency, Mo.
Owens, J. F., Ballinger Bldg.
Paul, T. M., 825 Fred Ave.
Potter, Geo., 7th & Edmond Sts.
Potter, T. E., 7th & Edmond Sts.
Patterson, F. A., Hughes Bldg.
Pitts, Barton, Pitts Bldg.
Renaud, E. C., King Hill Bldg.
Reynolds, J. B., 417 Francis St.
Riemer, M. E., 6014 King Hill Ave.
Riley, J. B., Commercial Bldg.
Sampson, J. H., 115 N. 5th St.
Schmid, W. F., Pitts Bldg.
Spencer, F. H., Moss Bldg.
Smith, B. H., State Hospital No. 2.
Smith, J. C., State Hospital No. 2.
Todd, L. A., Logan Block.
Thomas, C. E., Commercial Bldg.
Thompson, G. R., Hospital No. 2.
Toothaker, B. W., Hughes Bldg.
Walker, H. L., 926 N. 3rd St.
Woodson, C. R., Hospital No. 2.
Wallace, C. H., Logan Block.
Willman, R., 1505 Fred Ave.

BUTLER COUNTY.

A. W. KENDALL, President. J. J. NORWINE, Secretary.

MEMBERS.

Cadwell, Victor, Poplar Bluff.
Dewitt, Eskew, Poplar Bluff.
Highfill, W. E., Neeleyville.
Kendall, A. W., Poplar Bluff.
Mott, J. W., Poplar Bluff.
Norwine, J. J., Poplar Bluff.
Seybold, Ira W., Poplar Bluff.
Taylor, W. F., Poplar Bluff.
Windsor, A., Poplar Bluff.
Williamson, C. W., Poplar Bluff.
Wright, C. O., Poplar Bluff.

CALDWELL COUNTY.

C. C. LEEPER, President. TINSLEY BROWN, Secretary.

MEMBERS.

Brown, Tinsley, Hamilton.
Cowley, G. B., Cowgill.
Cramer, J. F., Cowgill.
Carr, B. F., Polo.
Cannon, J. W. M., Kidder.
Crawford, John R., Nettleton.
Dowell, G. S., Braymer.
Dodge, R. K., Polo.
Dwight, K. M., Hamilton.
De Lamater, Hashhook, Kidder.
Dewey, C. O., Breckenridge.
Eads, L. J., Hamilton.
Goins, Geo. W., Breckenridge.
Lindley, W. T., Hamilton.
Leeper, C. C., Braymer.
Mount, R. L., Polo.
McMurtrey, A. T., Kidder.
Shouse, Wm. S., Kingston.
Schroeder, A. H., Braymer.
Tiffin, Clayton, Hamilton.
Waterman, J. A., Breckenridge.
Woldridge, H. L., Breckenridge.
Wilkerson, J. O., Cowgill.
Woolsey, C. B., Braymer.

CALLAWAY COUNTY.

J. F. HARRISON, President. MARTIN YATES, Secretary.

MEMBERS.

Baker, N. F., Fulton.
Bayliss, W. M., Columbia.
Berry, J. W., Reform.
Bridges, A. D., New Haven.
Brunner, E. E., Carrollton.
Christian, C. H., New Bloomfield.
Crews, R. N., Williamsburg.
Davis, J. R., Mokane.
Gibbs, R. T., Hatton.
Gilman, D. C., Portland.
Harrison, J. F., Fulton.
McCall, G. D., Fulton.
Martin, Z. T., Albuquerque, N. Mex.
Owen, H. I., Fulton.
Roots, G. F., Tebbitts.
Wilfley, O. S., Millersburg.
Williams, P. E., Fulton.
Young, D. H., Fulton.
Yates, Martin, Fulton.

CAMDEN COUNTY.

GEO. M. MOORE, President. G. T. MYERS, Secretary.

MEMBERS.

Byler, W. F., Linn Creek.
Claiborn, Ed. G., Decaturville.
Clark, W. J., Linn Creek.
Ford, J. S., Linn Creek.
Hicks, E. S., Macks Creek.
Moore, Geo. M., Linn Creek.
Mills, S., Macks Creek
Moulder, Geo. A., Linn Creek.
Myers, G. T., Macks Creek.

CAPE GIRARDEAU COUNTY.

H. L. CUNNINGHAM, President. J. D. PORTERFIELD, JR., Secretary.

MEMBERS.

Brooks, J. Frank, Cape Girardeau.
Cunningham, H. L., Cape Girardeau.
Dalton, R. P., Cape Girardeau.
Futrell, H. B., Oak Ridge.
Hart, A. E., Dutchtown.
Henderson, R. T., Jackson.
Higdon, E. E., Allenville.
Howard, W. N., Cape Girardeau.
Patton, W. C., Cape Girardeau.
Porterfield, J. D., Jr., Cape Girardeau.
Rosenthal, M., Cape Girardeau.
Shultz, G. B., Cape Girardeau.
Statler, W. K., Oak Ridge.
Tarlton, G. W., Cape Girardeau.
Wichterich, R. F., Cape Girardeau.
Wilson, E. H. G., St. Louis.
Woods, S. E., Jackson.

CARROLL COUNTY.

W. C. BAIRD, President. R. F. COOK, Secretary.

MEMBERS.

Baird, W. C., Bogard.
Boggs, J. D., Rhoads.
Cook, R. F., Carrollton.
Hollister, W. L., Wakenda.
Highsmith, G. R., Carrollton.
Kemp, W. P., Hale.
Lee, B. J., Norborne.
Miller, S. W., Norborne.

CARTER—SHANNON COUNTY.

FRANK HYDE, President. J. A. CHILTON, Secretary.

MEMBERS.

Baltz, T. A., Birchtree.
Chilton, J. A., Van Buren.
Courtney, J. J., Birchtree.
Cotton, T. W., Van Buren.
Gillmor, W. L., Kansas City.
Gun, P. D., Birch Tree.
Hyde, Frank, Eminence.
Ross, L. C., Winona.

CASS COUNTY.

RODNEY D. RAMEY, President. J. S. TRIPLETT, Secretary.

MEMBERS.

Adair, T. W., Archie.
Barrett, W. H., Harrisonville.
Brierly, H. A., Peculiar.
Chaffin, W. F., Raymore.
Clemmons, W. M., Cleveland.
Crawford, H. S., Harrisonville.
Dawson, B. E., Belton.
Elders, A. R., Harrisonville.
Ellis, D. C., Garden City.
Ellis, F. B., Garden City.
Fair, S. W., Belton.
Farnsworth, A. D., Drexel.
Farrow, G. W., East Lynne.
Foster, F. W., East Lynne.
Gilham, E. M., Belton.
Griffith, D. R., Creighton.
Jerard, H., Pleasant Hill.
Keller, R. G., Freeman.
Longacre, C. E., Freeman.
Overholser, M. P., Harrisonville.
Ramey, R. D., Garden City.
Schoor, Albert H., Garden City.
Schoor, Edward, Garden City.
Scott, J. U., Harrisonville.
Smith, Ira, Austin.
Triplett, J. S., Harrisonville.
Walker, R. P., Belton.
Wood, L. M., Pleasant Hill.
Wunnicke, A. C., Drexel.

CHARITON COUNTY.

HARRY C. TATUM, President. C. A. JENNINGS, Secretary.

MEMBERS.

Austin, M. B., Brunswick.
Billeter, W. J., Bynumville.
Brummall, J. D., Salisbury.
Baker, J. H. P., Salisbury.
Baker, W. L., Salisbury.
Epperly, R. G., Prairie Hill.
Gaines, J. R., Mussell Fork.
Hawkins, G. W., Triplett.
Hughes, B., Keytesville.
Jennings, C. A., Salisbury.
Knott, Isaiah, Keytesville.
Kirkpatrick, H. E., Dalton.
McAdam, J. D., Prairie Hill.
McEwen, Oliver, Shannondale.
Pitney, Orville, Forest Green.
Temple, C. H., Rockford.
Tatum, Harry C., Brunswick.
Wallace, J. S., Brunswick.
Welch, J. F., Salisbury.
Zilman, A. W., Indian Grove.

CLARK COUNTY.

L. M. DICKSON, President. A. C. BRIDGES, Secretary.

MEMBERS.

Bridges, A. C., Kahoka.
Bridges, J. R., Kahoka.
Dickson, L. M., Revere.
Harris, H. W., Winchester.
Hiller, F. B., Kahoka.
Martin, W. H., Kahoka.
McKee, L. D., Wayland.
Sisson, W. B., Kahoka.
Shanks, C. O., Canton.
Teel, A. W., Kahoka.

CLAY COUNTY.

L. J. JONES, President. F. H. MATTHEWS, Secretary.

MEMBERS.

Allen, J. M., Liberty.
Atton, G. P., Barry.
Atkins, Calvin, Independence.
Bogart, T. N., Excelsior Springs.
Cuthbertson, W. N., Liberty.
Cox, H. A., Missouri City.
Fulton, F. H., Lathrop.
Gaines, J. J., Excelsior Springs.
Griffin, J. M., Excelsior Springs.
Jones, H. S., Kansas City.
Jones, L. J., Linden.
Lightfoot, Frank, Excelsior Springs.
Lowrey, Ernest, Excelsior Springs.
Marsh, J. T., Liberty.
Matthews, F. H., Liberty.
Miller, E. H., Liberty.
McCullouch, George, Kearney.
Ralph, A. B., Missouri City.
Rice, J. J., Kearney.
Rice, J. T., Excelsior Springs.
Rowell, H., Kearney.
Rothwell, J. H., Liberty.
Sevier, R. E., Liberty.
Suddarth, C. H., Smithville.
Ward, T. J., Birmingham.
Wallace, W. S., Excelsior Springs.
Wysong, W. L., Missouri City.
Wilson, J. P., Liberty.

CLINTON COUNTY.

JOHN STURGIS, President. E. A. COLLEY, Secretary.

MEMBERS.

Colley, E. A., Plattsburg.
Kay, John, Perrin.
Mitchell, A. R., Mecca.
Rea, Robt. W., Plattsburg.
Reynolds, S. D., Gower.
Rush, G. B., Lathrop.
Starks, J. C., Gower.
Sturgis, John, Perrin.
Steckman, P. M., Plattsburg.
Winn, J. W., Plattsburg.
Woods, R. J., Trimble.

COLE COUNTY.

J. P. PORTH, President. G. ETTMUELLER, Secretary.

MEMBERS.

Bedford, S. V., Jefferson City.
Clark, W. A., Jefferson City.
Ettmueller, G., Jefferson City.
Enloe, C., Jefferson City.
Enloe, I. N., Jefferson City.
Hill, J. A., Jefferson City.
Hough, C. P., Jefferson City.
Leach, L. T., Elston.
Lopp, J. E., Jefferson City.
McAlester, A. W., Jefferson City.
Moore, O. L., Jefferson City.
Martin, J. B., Sr., Russelville.
Norwood, W. W., Russelville.
Porth, J. P., Jefferson City.
Son, E. R., Osage City.
Thorpe, J. L., Jefferson City.
Yates, S. C., Wardsville.

COOPER COUNTY.

P. L. HURT, President. JOHN R. LIONBERGER, Secretary.

MEMBERS.

Allee, E. M., Bunceton.
Cochran, O. W., Gooch Mill.
Evans, R. L., Boonville.
Hurt, P. L., Boonville.
Lionberger, J. R., Boonville.
Meredith, A. L., Wooldridge.
Monroe, A. E., Otterville.
Parish, J. S., Pleasant Green.
Poindexter, J. W., Prairie Home.
Quigg, H. D., Blackwater.
Reynolds, W. H., Lupus.
Rice, E. L., Otterville.
Russell, G. A., Boonville.
Smith, A. J., Boonville.
Smiley, F. R., Boonville.
Taylor, J. T., Speed.
Teel, S. M., Prairie Home.
Van Ravenswaay, C. H., Boonville.
Wilson, E. A., Blackwater.

CRAWFORD COUNTY.

W. A. METCALF, President. A. H. HORN, Secretary.

MEMBERS.

Bamber, W. J., Wilson Mills.
Coffee, J. T., Steelville.
Cox, Walter S., Cuba.
Herzog, G. G., Cuba.
Horn, A. H., Steelville.
Metcalf, W. A., Steeleville.
Metlock, Clarence, Steelville.

DAVIESS COUNTY.

J. D. DUNHAM, President. M. A. SMITH, Secretary.

MEMBERS.

Brosius, W. L., Gallatin.
Clagett, O. F., Jamesport.
Depew, F. L., Altamont.
Dunham, J. D., Pattonsburg.
Doolin, L. R., Gallatin.
Eastman, F. C., Winston.
Hedges, Frank, Pattonsburg.
Minnick, A. G., Locksprings.
Songer, H. E., Jamesport.
Smith, M. A., Gallatin.
Thompson, O. N., Locksprings.
Wetzel, N. M., Jameson.
Waller, C. E., Altamont.

DUNKLIN COUNTY.

N. F. KELLY, President. G. L. JOHNSON, Secretary.

MEMBERS.

Baldwin, Paul, Kennett.
Beall, J. W., Malden.
Beall, H. E., Malden.
Birchett, J .G., Cardwell.
Back, Eli, Cardwell.
Bond, V. H., Cotton Plant.
Brown, J. L., Campbell.
Cone, M. L., Campbell.
Chaney, Jason, Senath.
Caldwell, J. F., Kennett.
Egbert, T. H., Kennett.
Finney, W. B., Kennett.
Hughes, W. G., Campbell.
Hammersly, G. O., Poplar Bluff.
Johnson, G. L., Kennett.
Kelly, N. F., Kennett.
May, C. A., Campbell.
Marshall, E. A., Hornersville.
Mobley, A. B., Kennett.
Price, W. A., Campbell.
Price, H. F., Senath.
Rigdon, T. J., Kennett.

FRANKLIN COUNTY.

H. A. BOOTH, President. A. C. BROWN, Secretary.

MEMBERS.

Booth, H. A, Pacific.
Briegleb, Chas. F., St. Clair.
Brown, A. C., Moselle.
Dunnigan, J. P., Sullivan.
Eimbeck, A. F., New Haven.
Eimbeck, Wm. F., New Haven.
Hempker, W. H., Catawissa.
Kitchell, W. E., St. Clair.
Mattox, W. P., Sullivan.
May, H. A., Washington.
McNay, A. L., Pacific.
North, W. R., Labadie.
Owens, I. M., Casco.
Poppenhusen, H. A. C., Washington.
Rusk, E. McD., Villa Ridge.
Rusk, Jno. A., Grays Summit.
Snow, Edward A., Union.
Stierberger, E. A., Union.
Williams, D. E., Lone Dell.
Wyllie, B. D. S., Union.

GASCONADE—MARIES—OSAGE COUNTY.

JOHN J. FERRELL, President. J. W. NIEWEG, Secretary.

MEMBERS.

Aufder Heide, Frederick, Drake.
Burgess, J. W., Belle.
Engelbrecht, Jno., Stony Hill.
Ferrell, J. J., Owensville.
Ferrell, W. R., Bland.
Nieweg, J. W., Lois.
Radamacker, J. J., Meta.
Seba, J. D., Bland.
Seba, W. E., Bland.
Spurgon, M. E., Red Bird.

GREENE COUNTY.

W. P. PATTERSON, President. ROBT. M. COWAN, Secretary.

MEMBERS.

Barnes, G. W., Springfield.
Bartlett, J. R., Springfield.
Boyd, Jno. R., Springfield.
Camp, W. A., Springfield.
Clements, C. C., Springfield.
Coffelt, T. A., Springfield.
Cowan, R. M., Springfield.
Cox, Lee, Springfield.

Farnesworth, D. B., Springfield.
Fulbright, Jno. H., Springfield.
Fulbright, J. Harve, Springfield.
Fulton, C. E., Springfield.
Hill, H. S., Springfield.
Hunter, R. B., Springfield.
James, W. C., Springfield.
Matthews, J. C., Springfield.
Nixon, J. H., Springfield.
Ormsbee, J. L., Springfield.
Patterson, W. P., Springfield.
Peak, O. L., Springfield.
Purselley, W. L., Springfield.
Ralston, J. P., Springfield.
Ross, F. E., Springfield.
Sherman, D. U., Elwood.
Smith, W. M., Springfield.
Tefft, J. E., Springfield.
Terry, N. F., Springfield.
Williams, J. W., Springfield.
Woody, C. E., Springfield.

GRUNDY COUNTY.

N. E. SUTTON, President. W. H. WINNINGHAM, Secretary.

MEMBERS.

Adams, W. R., Laredo.
Asher, J. A., Trenton.
Allen, E., Hickory.
Addington, W. H., Spickards.
Cash, R. B., Spickards.
Coon, D. W., Trenton.
Davenport, R. G., Trenton.
Elder, A. L., Trenton.
Fulkerson, W. D., Trenton.
Hunter, W. R., Trenton.
Lowrey, H. L., Tindal.
Moore, G. A., Dunlap.
Moore, T. E., Edinburg.
Pittman, W. T., Spickards.
Sheldon, Samuel, Trenton.
Stewart, B. S., Bethany.
Stone, J. M., Laredo.
Sutton, Noah E., Trenton.
Sutton, Bertha E., Trenton.
Tracy, Mettie E., Spickards.
Travis, K. W., Spickards.
Webster, C. L., Trenton.
Wright, J. B., Trenton.
Winningham, W. H., Edinburg.

HARRISON COUNTY.

A. H. VANDIVERT, President. W. H. WILEY, Secretary.

MEMBERS.

Bryson, E. H., Bethany.
Broyls, F. H., Bethany.
Chiff, J. K., New Hampton.
Eades, M. H., New Hampton.
Gwinn, G. E., Bethany.
Mitchell, C. A., Blythedale.
Morroway, J. H. J., Ridgeway.
Robertson, C. H., Eagleville.
Robertson, C. W., Ridgeway.
Sellers, C. J., Mt. Moriah.
Stewart, B. S., Bethany.
Stoughton, E. L., Mt. Moriah.
Sutton, B. M., Happy Valley.
Vandivert, A. H., Bethany.
Wiley, W. H., Ridgeway.
Williams, A. W., Ridgeway.

HENRY COUNTY.

WM. M. SHANKLAND, President. F. M. DOUGLASS, Secretary.

MEMBERS.

Benway, Wm. H., Deepwater.
Barr, Bernice B., Clinton.
Beatty, Joseph G., Clinton, R.F.D. No. 2.
Britts, John H., Clinton.
Douglass, F. M., Clinton.
Fewell, R. B., Montrose.
Gibbins, Wm. H., Clinton.
Griffith, Charles E., Windsor.
Haire, Robt. D., Clinton.
Hampton, Joseph R., Clinton, R.F.D. No. 1.
Head, Charles W., Windsor.
Menees, G. W., Clinton.
Miller, J. M., Montrose.
Poaque, Samuel A., Clinton.
Russell, John J., Deepwater.
Shankland, Wm. M., Clinton.
Wallis, J. R., Clinton.
Woltzen, S. W., Urich.

HOLT COUNTY.

C. L. EVANS, President. J. F. CHANDLER, Secretary.

MEMBERS.

Aiken, S. W., Oregon.
Bullock, F. E., Forest City.
Bickel, J. T., Mound City.
Chandler, J. F., Forest City.
Davis, T. O., Maitland.
Davis, J. M., Craig.
Evans, C. L., Oregon.
Gray, M. S., Craig.
Kelley, P. D., Corning.
Kaltenbach, E., Craig.
Miller, J. W., Mound City.
Miller, E. M., Mound City.
Minton, J. R., Fortesque.
Quigley, B. T., Mound City.
Tracy, J. M., Mound City.
Williams, Ira, Maitland.

HOWARD COUNTY.

A. W. MOORE, President. C. W. WATTS, Secretary.

MEMBERS.

Bonham, V. Q., New Franklin.
Burkholder, O. F., Higbee.
Champion, J. R., Hildale.
Cordry, H. V., Boonville.
Dinwiddie, T. H., Higbee.
Fleet, J. B., New Franklin.
Haller, E. C., Harrisburg.
Hume, J. Y., Armstrong.
Lewis, C. O., Fayette.
Lee, C. H., Fayette.
Moore, A. W., Fayette.
Smith, N. E., Fayette.
Thompson, W. S., Armstrong.
Watts, C. W., Fayette.
White, J. A., New Franklin.
Williams, W. E., Myers.
Wood, J. F., Harrisburg.
Wright, U. S., Fayette.

HOWELL COUNTY.

J. W. BINGHAM, President. H. C. SHUTTEE, Secretary.

MEMBERS.

Bingham, J. W., Pottersville.
Culp, J. C., Koshkonong.
Davis, J. C. B., Mountain View.
Dixon, J. C. B., West Plains.
Johnson, J. McBride, West Plains.
Mitchell, E. H., Pottersville.
Nichols, D. J., West Plains.
Reiley, J. F., West Plains.
Rowe, H. J., Willow Springs.
Shuttee, H. C., West Plains.
Spears, Robt. S., West Plains.
Thompson, A. H., Lanton.
Thornburg, A. H., West Plains.

IRON COUNTY.

R. W. GAY, President. IRA. A. MARSHALL, Secretary.

MEMBERS.

Adams, J. Q., Belleview.
Adams, J. Q., Goodland.
Clarkson, David, Annapolis.
Gay, R. W., Ironton.
Marshall, Ira A., Ironton.

JACKSON COUNTY (KANSAS CITY).

ROBERT T. SLOAN, President. MAX GOLDMAN, Secretary.

MEMBERS.

Abrams, W. E., 523 Rialto Bldg.
Adams, Noah, 317 Rialto Bldg.
Andersson, H. C., 716 Shukert Bldg.
Atkins, Calvin, Independence.
Armour, Wallace A., 3505 E. 12th St.
Ayers, Samuel, 1208 Wyandotte St.
Balsley, J. A., 3330 Woodland Ave.
Barbee, C. M., 522 Rialto Bldg.
Beattie, Thos. J., 603 Commerce Bldg.
Beedle, G. A., 314 Altman Bldg.
Beil, J. Wallace, 805 McGee St.
Bellows, G. E., 429 Rialto Bldg.
Berry, G. F., 527 Rialto Bldg.
Binnie, J. F., 12th & Wyandotte Sts.
Block, J., 502 Commerce Bldg.
Bowman, Dora E., 327 Rialto Bldg.
Bowman, J. W., 402 Hall Bldg.
Brainard, B. F., Martin City.
Brown, Ralph J., 534 Altman Bldg.
Bruehl, Julius, 500 New Ridge Bldg.
Brunig, F. H., 3137 Main St.
Burckhardt, A. E., 2309 Summit St.
Burke, C. L., 304 Deardorff Bldg.
Burnett, S. Grover, 425 Rialto Bldg.
Burrill, C. W., 623 Shukert Bldg.
Callaghan, Richard, 540 Cambridge Ave.
Campbell, Wm. L., 15th & Jackson Ave.
Carbaugh, Eugene, 430 Rialto Bldg.
Carl, S. T., 350 Ridge Bldg.
Castelaw, R. E., 13 Woodworth Ave.
Cathcart, C. P., 419 Deardorff Bldg.
Chambers, J. Q., 705 Shukert Bldg.
Chambliss, E. L., 523 Rialto Bldg.
Child, Scott P., 705 Shukert Bldg.
Clements, Jos., Nutley, N. J.
Coffey, W. H., 500 Bellefontaine Ave.
Coffin, G. O., 500 New Ridge Bldg.
Coleman, H. B., 3032 E. 18th St.
Cook, F. L., Blue Springs.
Cooper, C. L., 4513 Independence Ave.
Cordier, A. H., 310 Rialto Bldg.
Cross, R. O., 317 Rialto Bldg.
Cross, W. M., 1005 Campbell St.
Crowder, W. H., 4647 Independence Ave.
Crowell, H. C., 410 Century Bldg.
Curdy, R. J., 614 Commerce Bldg.
Curry, E. R., 304 Deardorff Bldg.
Dailey, F. W., 327 Altman Bldg.
Dannaker, C. A., 425 Walrand Ave.
Davis, A. W., 3303 Woodland Ave.
Davis, G. W., 407 Century Bldg.
Dove, O. H., 413 Rialto Bldg.
Drake, N. A., 1001 Harrison St.
Dunham, S. A., 1302 Garfield Ave.
Edmonson, M. M., 2216 Brooklyn Ave.
Eldredge, J. S., 1021 Grand Ave.
Eubank, A. E., 3021 Southwest Blvd.
Farney, H. Mercedes, 2 Wabash Ave.
Fields, Thomas, 18th & Prospect Ave.
Foster, Hal, 402 Altman Bldg.
Frankenberger, J. M., 534 Rialto Bldg.
Freyman, A. A., 1201 Independence Ave.
Frick, William, 301 Rialto Bldg.
Frick, W. J., 311 Commerce Bldg.
Fryer, B. E., 520 E. 9th St.
Fulton, A. L., 430 Deardorff Bldg.
Fulton, C. M., 534 Altman Bldg.
Gaines, J. W., 406 Rialto Bldg.
Goldman, Max, 309 Century Bldg.
Greenlee, A. R., 3016 E. 11th St.

Griffith, J. D., 522 Rialto Bldg.
Hall, C. Lester, Bryant Bldg.
Hall, D. Walton, Bryant Bldg.
Hall, Frank J., 228 Olive St.
Halley, George, Ridge Bldg.
Hamel, Geo. F., 706 W. 10th St.
Hanawalt, H. O., 1214 Main St.
Hanna, M. A., 2711 Brooklyn Ave.
Hardin, C. B., Rialto Bldg.
Harrelson, N. O., Rialto Bldg.
Harrington, J. L., 1021 Grand Ave.
Harrison, Addison, Lee's Summit.
Hashinger, Geo. H., Rialto Bldg.
Hays, H. C., 310 Century Bldg.
Hedrick, C. L. V., 3108 Cherry St.
Henry, Fannie J., 2203 Brooklyn Ave.
Hertzler, A. E., 508 Altman Bldg.
Hetherington, E. M., Altman Bldg.
Hickerson, J. C., Independence.
Hill, Howard, Rialto Bldg.
Horigan, J. A., 3100 Main St.
Hubbard, E. E., Rialto Bldg.
Hyde, B. C., 404 Bryant Bldg.
Iuen, F. J., 1334 Grand Ave.
Jacobs, Ben, Altman Bldg.
Jackson, C. A., Rialto Bldg.
Jackson, J. N., Rialto Bldg.
Jerowitz, H. D., 1233 Grand Ave.
Johnson, J. H., Coffeyville, Kan.
Jones, O. F., Rialto Bldg.
Jones, K. P., 1028 Walnut St.
James, S. C., Bryant Bldg.
Jenkins, W. H., 1008 Broadway.
King, Geo. A., 400 Altman Bldg.
King, W. E., 403 Commerce Bldg.
Kepner, Jno. W., 720 Shukert Bldg.
Kimberlin, Jos. W., 532 Altman Bldg.
Knoche, J. P., 912 Walnut St.
Kuhn, Wm. F., Farmington.
Kyger, J. W., 815 E. 31st St.
Lahmer, Ira B., 1336 Broadway.
Lane, H. H., 800 Southwest Blvd.
Langsdale, J. M., Altman Bldg.
Laning, J. H., 623 Shukert Bldg.
Lee, R. H., 506 Prospect Ave.
Lyle, Halsey M., 532 Altman Bldg.
Loyd, O. H., Oak Grove.
Lauranzana, Louis, 5th & Cherry Sts.
Leonard, H. O., 521 Shukert Bldg.
Leonard, W. H., 601 Southwest Blvd.
Lester, Chas. H., Bryant Bldg.
Lewis, J. K., 1212 Troost Ave.
Lewis, Nannie P., 1219 Wyandotte St.
Lichtenberg, Jos., 1209 Wyandotte St.
Logan, James E., 1229 Wyandotte St.
Look, H. H., 428 Altman Bldg.
Luscher, Louis W., 12th & Grand Ave.
McCall, H. B., 12th & Main Sts.
McCandless, O. H., 305 Altman Bldg.
McCrea, Maggie, 536 Ridge Bldg.
McDonald, Chet., Rialto Bldg.
McDonald, Park L., 527 Rialto Bldg.
McKee, Jos. W., Rialto Bldg.
McQuade, H. D., 435 New Ridge Bldg.
McVey, Newton, Rialto Bldg.
Manahan, J. H., 534 Ridge Bldg.
Mann, A. W., Oak Grove.
Mark, E. G., 1208 Wyandotte St.
Martin, H. L., 601 E. 12th St.
Martin, J. C., 3026 E. 23d St.
Merriman, C. S., 2511 Forest Ave.
Middleton, James, 412 N. Montgall Ave.
Miller, Abram., Rialto Bldg.
Miller, Hugh, 1021 Grand Ave.
Mitchell, G. B., Rialto Bldg.
Mitchell, John T., 510 Ridge Bldg.
Montgomery, W. E., Rialto Bldg.
Morris, W. C., 315 Garfield Ave.
Morrow, C. J., Bryant Bldg.
Morrow, W. F., Altman Bldg.
Mosher, Geo. C., Bryant Bldg.
Mott, Jno. S., Rialto Bldg.
Murphy, Franklin E., Deardorff Bldg.
Neff, F. C., Altman Bldg.
Newhouse, Stanley, 452 Ridge Bldg.
Norberg, Geo. P., 526 Altman Bldg.
Owens, M. J., 603 Southwest Blvd.
O'Connor, C., 815 McGee St.
O'Donnell, Alfred, 327 Altman Bldg.
Parker, O. H., 12th & Central Sts.
Pearse, Herman E., Rialto Bldg.
Perkins, John W., Altman Bldg.
Pettijohn, N. J., 1310 Tracy Ave.
Porter, Allen, Rialto Bldg.
Porter, D. R., 10th & Washington Sts.
Punton, John, Altman Bldg.
Pickerill, C. W., 501 Rialto Bldg.
Pinckard, C. G., 8th & Campbell Sts.
Rathbone, F. W., Rialto Bldg.
Reed, W. M., Rialto Bldg.
Reyling, F. T., 1119 Troost Ave.
Richardson, Katherine B., Ridge Bldg.
Rice, William, 402 Hall Bldg.
Ridge, I. M., Ridge Bldg.
Riegle, D. H., 14th & Summit Sts.
Ritter, C. A. Altman Bldg.
Roberts, Clarence F., 720 Shukert Bldg.
Roberts, C. S., Lee's Summit.
Robertson, J. A., 705 Shukert Bldg.
Robinson, Ernest F., Bryant Bldg.
Robinson, J. L., Altman Bldg.
Rogers, J. C., Rialto Bldg.
Rosenwald, Leon, Rialto Bldg.
Russell, E. L., 305 Altman Bldg.
Sams, W. M., 806 Independence Ave.
Sanders, Frank L., 517 Shukert Bldg.
Sanders, St. Elmo, Rialto Bldg.
Sandzen, Carl, Rialto Bldg.
Sawyer, J. F., 5th & Lydia Ave.
Schauffler, E. W., Deardorff Bldg.
Schauffler, Robt. McE., Deardorff Bldg.
Schutz, W. H., Bryant Bldg.
Scott, J. N., Ridge Bldg.
Sexton, M. P., Century Bldg.
Sheley, O. C., Independence.
Sherer, Jos. W., 1208 Wyandotte St.
Singleton, J. M., 15th & Troost Ave.
Sloan, Robt. T., Rialto Bldg.
Smith, Avis E., University Bldg.
Smith, Robt. M., 203 E. 12th St.
Snider, J. S., 403 Commerce Bldg.
Spaulding, C. L., Altman Bldg.
Stephens, Nannie A., 813 E. 31st St.
Stevens, W. W., Greenwood.
Stewart, E. L., 521 Shukert Bldg.
Streett, St. Clair, 123 W. 12th St.
Strother, J. S., 311 Commerce Bldg.
Talbot, Ambrose, Rialto Bldg.
Taylor, L. G., 720 Woodland Ave.
Tesson, N. A. G., 332 Shukert Bldg.
Thomas, A. W., Shukert Bldg.
Thompson, G. B., 12th & Central Sts.
Thompson, James, Rialto Bldg.
Thompson, J. H., Deardorff Bldg.
Thornton, T. R., Lee's Summit.
Thrailkill, E. H., Rialto Bldg.
Tiffany, F. B., 805 McGee St.
Trimble, W. K., 2742 Holmes St.
Tureman, H. G., 702 Commerce Bldg.
Twyman, G. T., Independence.
Van Eman, F. T., Altman Bldg.
Van Quast, Ernst, Century Bldg.
Waddell, Susan C., 3027 Montgall Ave.
Wall, A. H., 3839 Independence Ave.
Watson, B. F., Rialto Bldg.
Wedding, E. V., 15th & Brooklyn Ave.
Weiss, F. H., 415 Deardorff Bldg.
Welch, A. J., 29th & Southwest Blvd.
West, W. C., 531 Rialto Bldg.
Wever, J. S.
Wheeler, B. H., 324 Deardorff Bldg.
Wheeler, W. S., 12th & Grand Ave.
Willitts, W. C., Rialto Bldg.
Wilson, A. M., 906 Main St.
Wilson, Dora G., University Bldg.
Wilson, John, 720 Shukert Bldg.
Wolf, I. J., Rialto Bldg.
Wood, N. P., Independence.
Young, Oscar O., 5918 Troost Ave.
Zwart, B. H., 1019 Prospect Ave.

JASPER COUNTY.

A. B. FREEMAN, President. J. T. STAMEY, Secretary.

MEMBERS.

Balsley, T. M., Joplin.
Cummings, C. C., Joplin.
Chenoweth, L. C., Webb City.
Clark, J. W., Carterville.
Freeman, A. B., Joplin.
Granthan, S. A., Joplin.
Gray, J. M., Chitwood,
James, R. M., Joplin.
Kay, Z. L., Joplin.
Kelso, R. S., Joplin.
Kinchelow, M. B., Joplin.
Lewis, W. E., Chitwood.
Lanyon, W. H., Joplin.
Matthews, L. I., Joplin.
Miller, S. H., Joplin.
Miller, Geo. W., Joplin.
Neff, R. L., Joplin.
Nunn, G. G., Joplin.
Pifer, J. D., Joplin.
Rogers, W. H., Asbury.
Snyder, R. A., Joplin.
Shelton, C. M., Joplin.
Stamey, J. T., St. Joseph.
Spriggs, M. S., Joplin.
Watkins, C. H., Joplin.

JEFFERSON COUNTY.

W. H. FARRAR, President. H. W. ELDERS, Secretary.

MEMBERS.

Auerswald, G. A., De Soto.
Bryan, C. G., De Soto.
Donnell, R. E., De Soto.
Donnell, J. F., Festus.
Elders, H. Will, De Soto.
Elders, G. W. N., Hematite.
Elders, Geo. W., Ware.
Farrar, W. H., De Soto.
Gibson, W. E., De Soto.
Hensley, O. E., Pevely.
Harris, C. G., Festus.
Hamel, A. H., DeSoto.
Hull, W. W., Sulphur Springs.
Jones, J. E., Hillsboro.
Long, F. S., De Soto.
McNutt, I. N., Pevely.
Mockbee, G. M., Hillsboro.
Neff, J. B., De Soto.
Pickel, J. W., Crystal City.
Prentiss, H. S., De Soto.
Stegman, J. E., Frumet.
Tidwell, Geo. W., De Soto.

JOHNSON COUNTY.

M. P. SHY, President. E. H. GILBERT, Secretary.

MEMBERS.

Aber, W. H., Montserrat.
Adcock, J. A. B., Warrensburg.
Anderson, J. T., Cornelia.
Anderson, J. I., Warrensburg.
Bozarth, John A., Centerville.
Berry, A. J., Warrensburg.
Bradley, T. L., Warrensburg.
Case, Z., Warrensburg.
Calloway, G. L., Warrensburg.
Gilbert, E. H., Warrensburg.
Hall, O. B., Warrensburg.
Johnson, W. E., Warrensburg.
McGinnis, H. F., Hoffman.
Murray, L. F., Warrensburg.
Ozias, C. O., Warrensburg.
Park, Henry, Dunksburg.
Porter, W. E., Knobnoster.
Rice, J. M., Columbus.
Schofield, L. J., Warrensburg.
Schooley, R. C., Robins.
Shy, M. P., Knobnoster.
Thompson, W. G., Holden.
Tilton, A. L., Truxton, Ariz.

KNOX COUNTY.

L. S. BROWN, President. HENRY J. JURGENS, Secretary.

MEMBERS.

Arnett, Andrew, Novelty.
Brown, Geo. S., Edina.
Brown, L. S., Edina.
Jurgens, Henry J., Edina.
Luman, F. E., Baring.
Myers, James, Greensburg.
Northcutt, J. R., Knox City.
St. John, Horace H., Edina.

LACLEDE COUNTY.

J. M. BILLINGS, President. J. A. McCOMB, Secretary.

MEMBERS.

Barker, J. C., Russ.
Billings, J. M., Lebanon.
Carleton, C. E., Stoutland.
Jacobs, J., Conway.
Lockwood, W. A., Conway.
McComb, J., Lebanon.
McComb, J. A., Labanon.
Perkins, J. M., Lebanon.
Pinckard, J. A., Lebanon.
Pritchett, P. L.
Ritchey, Robt., Dry Glaize.

LAFAYETTE COUNTY.

P. S. FULKERSON, President. C. T. RYLAND, Secretary.

MEMBERS.

Barclay, W. D., Odessa.
Braecklein, W. A., Higginsville.
Cope, J. Q., Lexington.
Carter, R. C., Higginsville.
Fredendall, G. W., Lexington.
Fulkerson, P. S., Lexington.
Fulkerson, J. J., Lexington.
Gaines, E. F., Bates City.
George, J. H., Odessa.
Hitt, R. E. L., Oklahoma City, O. T.
Harwood, W. G., Dover.
McGinnis, Frank, Higginsville.
Mann, J. A., Wellington.
Mann, F. W., Wellington.
Perrie, J., Mayview.
Ramsey, C. F., Dover.
Ryland, C. T., Lexington.
Schneider, J. A., Concordia.
Tucker, J. E., Lexington.
Webb, W. C., Higginsville.
Williams, Geo., Odessa.
Williams, H., Odessa.

LINCOLN COUNTY.

S. R. McKAY, President. W. P. SMITH, Secretary.

MEMBERS.

Avery, C. D., Troy.
Beatty, J. D., Troy.
Blackamore, T. A., Olney.
Duwelins, L. H., Briscoe.
Hicks, E. A., Old Monroe.
Mackey, A. C., Ethlyn.
McKay, S. R., Troy.
Parker, J. H., Moscow Mills.
Pendleton, L., Troy.
Smith, W. P., Troy.
Strickland, J. R., Moscow Mills.
Taylor, A. M., Elsberry.

LINN COUNTY.

KATHRYN V. STANDLY, President. D. F. HOWARD, Secretary.

MEMBERS.

Burke, J. L., Laclede.
Burke, F. W., Laclede.
Buck, U. G., Rothville.
Cochran, F. B., Brookfield.
Cantwell, J. L., Bucklin.
Dryden, U. C., Purdin.
Eure, J. B., Brookfield.
Evans, J. S., Brookfield.
Fore, T. P., Brookfield.
Haley, Robt., Brookfield.
Howard, D. F., Brookfield.
Jenkins, C. E., Brookfield.
Lane, J. W., Linneus.
Morris, Robt. H., Linneus.
Mason, J. W., Brookfield.
Putnam, Ola, Marceline.
Putnam, B. B., Marceline.
Pettijohn, A. C., Brookfield.
Perrin, J. H., Marceline.
Oven, T. P., Brookfield.
Standly, Kathryn V., Brookfield.
Standly, Z. T., Laclede.
Standly, E. D., Linneus.
Stratton, C. D., Rothville.
Thompson, J. M., Meadville.

LIVINGSTON COUNTY.

DAVID GORDON, President. JOHN F. CHERRINGTON, Secretary.

MEMBERS.

Alexander, G. W., Chula.
Beeman, S. M., Chillicothe.
Barney, R., Chillicothe.
Batdorff, F. P., Farmersville.
Carver, H. N., Chillicothe.
Cherrington, J. F., Chillicothe.
Chaffin, R. E., Avalon.
Cobtell, R. H., Chillicothe.
Gordon, Geo. A., Chillicothe.
Gibson, H. C., Mooresville.
Girdner, W. M., Chillicothe.
Grace, H. M., Chillicothe.
Gordon, David, Chillicothe.
Hutchinson, G. W., Jamesport.
Houf, W., Farmersville.
Henderson, W. A., Kansas City.
Murray, R. W., Dawn.
Ogan, E. F., Chula.
Platt, K. S., Chillicothe.
Stevens, B. N., Chillicothe.
Simpson, A. J., Chillicothe.
Simpson, W. R., Chillicothe.
Swope, Wm. A., Wheeling.
Tracy, L. E., Chillicothe.
Trimble, J. W., Wheeling.
White, W. L., Springhill.
Winter, J. H., Parkville.

MACON COUNTY.

W. H. MILLER, President. C. W. REAGAN, Secretary.

MEMBERS.

Allen, F. W., Callao.
Bradley, W. E., Ethel.
Brewington, G. F., Bevier.
Bunch, B. F., Bloomington.
Burton, S. L., College Mound.
Campbell, J. F., La Plata.
Drew, F. W., Ethel.
Foster, J. P., Lacrosse.
Hunt, J. R., Ardmore.
Mason, L. O., Bevier.

Milam, B. J., Macon.
Miller, A. B., Macon.
Miller, G. A., College Mound.
Miller, W. H., Macon.
Naylor, O., Atlanta.
Newton, F. H., Cash.
Norris, T. J., Macon.
Pipkin, W. D., Excello.
Raines, A. M., Tenmile.
Reagan, C. W., Macon.
Salyer, C. E., Callao.
Schwab, B. C., Ardmore.
Smith, C. W., Keota.
Smith, E. S., Macon.
Southern, J. N., Atlanta.
Tainter, Paul R., Callao.
Thompson, L. M., Macon.
Trippler, F. L., College Mound.
Webb, W.E., Macon.
Welch, W. A., Callao.

MADISON COUNTY.

G. W. GREENWOOD, President. C. U. DAVIS, Secretary.

MEMBERS.

Anthony, C. A., Fredericktown.
Banon, Harry, Mine Lamotte.
Cozzens, E. P., Fredericktown.
Davis, C. U., Fredericktown.
Dines, G. L., Mine Lamotte.
Gale, Frank W., Marquand.
Greenwood, G. W., Fredericktown.
Haley, O., Fredericktown.
Renfroe, J. H., Fredericktown.
Slaughter, S. C., Fredericktown.

MARION COUNTY.

R. H. GOODIER President. F. JANET REID, Secretary.

MEMBERS.

Banks, H. L., Hannibal.
Baskett, J. N., Hannibal.
Bounds, E. H., Hannibal.
Bourn, J. J., Hannibal.
Bush, F. W., Hannibal.
Chilton, J. C., Hannibal.
Chowning, Thos., Hannibal.
Farrell, J. J., Hannibal.
Goodier, Robt. H., Hannibal.
Hays, W. H., Hannibal.
Hornback. E. T., Hannibal.
Primm, J. N., Hannibal.
Reid, F. Janet, Hannibal.
Shanks, A. L., Hannibal.
Schmidt, Richard, Hannibal.
Vandiver, C. E., Palmyra.
Waldo, E. E., Hannibal.

McDONALD COUNTY.

E. F. DOTY, President. M. L. SELLERS, Secretary.

MEMBERS.

Beeson, H. O., Noel.
Best, W. S., Anderson.
Chase, A. U., Tiff City.
Denman, J. I., Southwest City.
Doty, E. T., Anderson.
Horton, W. H., Jane.
Sellers, M. L., Anderson.
Smith. B. F., Southwest City.
St. John, O., Pineville.

MERCER COUNTY.

H. P. CHESMORE, President. C. R. BUREN, Secretary.

MEMBERS.

Bristow, G. M., Princeton.
Buren, Chas. R., Princeton.
Chesmore, H. P., Princeton.
Nally, H., Cainsville.

MILLER COUNTY.

S. P. HICKMAN, President. G. D. WALKER, Secretary.

MEMBERS.

Allee, W. S., Olean.
Bowlin, B. F., Bagnell.
Brockman, C. O., Bagnell.
Brockman, H. H., Eldon.
DeVilbiss, F., Spring Garden.
Dickson, W. D., Tuscumbia.
Gilleland, J. L., Olean.
Hickman, S. P., Ulman.
Kouns, D. H., Tuscumbia.
Mace, G. R., Iberia.
Nixdorf, A. P., Pleasant Farm.
Temple, J. W., Eldon.
VonGremp, W. A., Iberia.
Walker, G. D., Eldon.

MISSISSIPPI COUNTY.

P. P. BOGGAN, President. W. P. HOWLE, Secretary.

MEMBERS.

Boggan, P. P., East Prairie.
Chapman, A. W., Charleston.
Hamner, W. D., Bertrand.
Howle, W. P., Charleston.
Martin, A. J., East Prairie.
Ogilvie, R. K., Charleston.
Rowe, John M., Charleston.
Reed, H. L., Charleston.
Story, C. A., Diehlstadt.
Wallace, G. R., Bertrand.

MONITEAU COUNTY.

J. B. STEWART, President. W. R. PATTERSON, Secretary.

MEMBERS.

Bramel, H. W., McGirk.
Burke, J. P., California.
Crum, J. A., California.
Dearing, W. A., Jamestown.
Elliott, W. H., Bunceton.
Freudenberger, H., Centertown.
Inglish, J. E., Bacon.
Klueber, H. C., California.
Latham, H. W., Latham.
Latham, L. L., Latham.
Marsh, J. W., Tipton.
Norman, J. B., California.
Patterson, W. R., Tipton.
Popejoy, H. R., High Point.
Robertson, J. M., Latham.
Stewart, J. B., Clarksburg.
Thorpe, A. V., Jamestown.
Wilson, G. S., Fortuna.

MONROE COUNTY.

S. M. BROWN, President. M. C. McMURRY, Secretary.

MEMBERS.

Baker, Chas., Santa Fe.
Bell, W. T., Stoutsville.
Blankenship, W. R., Madison.
Bodine, S. M., Paris.
Brown, John E., Florida.
Brown, S. M., Monroe City.
Carver, F. H., Madison.
Cassity, G. H., Tulip.
Day, C., Paris.
Dixon, C. H., Holliday.
Duncan, Edward, Long Branch.
Ely, A. E., Monroe City.
Johnson, G. A., Holliday.
Lloyd, T. B., Paris.
McMurry, M. C., Paris.
McNutt, W. B. A., Monroe City.
Moss, F. M., Paris.
Payne, H. C., Paris.
Shobe, H. G., Paris.

MONTGOMERY COUNTY.

J. L. JONES, President. W. M. WHEELER, Secretary.

MEMBERS.

Bonewitz, John, Jonesburg.
Bellamy, J. A., Middletown.
Hudson, D. O., Montgomery City.
Jones, J. L., Jonesburg.
Muns, G. E., Montgomery City.
Nowlin, David, Montgomery City.
Wheeler, W. M., High Hill.

MORGAN COUNTY.

W. L. HATLER, President. J. T. BEALE, Secretary.

MEMBERS.

Beale, John T., Versailles.
Blacksten, H. E., Excelsior.
Bohling, Cord, Pyrmont.
Hatler, W. L., Barnett.
Hubbard, Joel D., Versailles.
Kelley, R. Q., Versailles.
Lutmann, H. M., Versailles.
Well, Wm., Versailles.

NEW MADRID COUNTY.

WELTON O'BANNON, President. C. W. WATSON, Secretary.

MEMBERS.

Atkisson, J. A., Moorhouse.
Bell, J. B., Moorehouse.
Hallenbeck, T. S., Portageville.
Hart, J. W., Moorehouse.
O'Bannon, Welton, New Madrid.
Sparhawk, W. J., Marston.
Watson, C. W., New Madrid.
Williamson, Jno. J., New Madrid.

NEWTON COUNTY.

J. L. LAMSON, President. HORACE BOWERS, Secretary.

MEMBERS.

Benton, A. W., Neosho.
Bowers, H., Neosho.
Bridges, J. M., Tipton Ford.
Brown, W. D., Newtonia.
Campbell, Wm., Seneca.
Chapman, U. S., Diamond.
Cravens, W. A., Granby.
Doty, E. T., Anderson.
Foster, H. F., Neosho.
Hancock, J. B., Newtonia.
Harrison, G. Wm., Newtonia.
Hodges, J. J., Granby.
Lamson, J. W., Neosho.
Lamson, R. C., Neosho.
Langley, J. W., Granby.
Maas, A., Neosho.
Mixer, H. M., Neosho.
Porter, H. L., Seneca.
Roseberry, E. M., Neosho.
Russell, S. A., Stella.
Vancleave, C. T., Neosho.
Wills, R. L., Neosho.
Yates, Paul C., Neosho.

NODAWAY COUNTY.

F. R. ANTHONY, President. L. E. DEAN, Secretary.

MEMBERS.

Allen, A. B., Maryville.
Anthony, F. R., Maryville.
Crowson, E. L., Pickering.
Cummins, K. C., Maryville.
Day, Hiram, Parnell.
Dean, J. W., Maryville.
Dean, L. E., Maryville.
Dowell, H. S., Clearmont.
Ellis, C. A., Maryville.
Heryford, W. B., Pickering.
Howell, C. F., Burlington Junction.
Kessler, O. C., Ravenwood.
Koch, C. D., Maryville.
Large, S. D., Hopkins.
Larrabee, J. A., Barnard.
McClanahan, J. M., Guilford.
Morrison, J. B., Maryville.
Nash, G. A., Maryville.
Pierpoint, J. E., Skidmore.
Pollard, D. A., Barnard.
Stuckle, W. P., Clyde.
Todd, J. H., Maryville.
Saylor, H. L., Elmo.
Wallis, F. C., Maryville.
Wallis, W. M., Maryville.
Wood, W. S., Elmo.

PEMISCOT COUNTY.

B. D. CROWE, President. J. B. LUTEN, Secretary.

MEMBERS.

Bugg, A. F., Pascola.
Byars, H. T., Caruthersville.
Conrad, A. R., Caruthersville.
Crowe, B. D., Caruthersville.
Faris, J. C., Caruthersville.
Ferguson, P. P., Steele.
Hall, L. B., Caruthersville.
Hendrix, M. D., Caruthersville.
Hudgings, M. H., Caruthersville.
Johnson, John, Hayti.
Luten, J. B., Caruthersville.
Martin, Chas. E., Caruthersville.
Phipps, G. W., Caruthersville.
Swearingen, W. A., Steele.
Tipton, Paul, Cooter.

PERRY COUNTY.

T. M. HUDSON, President. F. M. VESSELLS, Secretary.

MEMBERS.

Blaylock, G. A., Silver Lake.
Bowman, C. B., Longtown.
Clark, J. P., Perryville.
Estel, T. F., Altenberg.
Garner, K. C., Crosstown.
Hatcher, W. H., Perryville.
Hudson, T. M., Perryville.
Manning, L. R., Brewer.
Morton, D. F., Perryville.
Russel, J. W., Longtown.
Vessells, F. M., Perryville.

PETTIS COUNTY (SEDALIA).

W. C. OVERSTREET, President. W. J. FERGUSON, Secretary.

MEMBERS.

Albers, E. A., Smithton.
Bronson, I. T., Royal Tribe Bldg.
Bohling, C., 5th & Ohio.
Bishop, B. T., Hughesville.
Cole, H. B., 501 So. Engineer.
Cole, W. M., 501 So. Engineer.
Collins, M. T., 219 Ilgenfritz Bldg.
Cowan, W. G., 504 So. Ohio.
Cartright, C. P., Sedalia R. F. D. No. 1.
Clabough, O. W., Green Ridge.
Dyer, David P., Dresden, Mo.
Dunlap, W. O., 108 West Main St.
Evans, W. H., Beaman.
Ferguson, W. J., 321 So. Ohio.
Ferguson, L., Green Ridge.
Fisher, Amos T., Citizens' Bank Bldg.
Harris, B. W., Georgetown.
Hite, H. A., Green Ridge.
Hubbard, Joel D., 13th & Ohio.
Kelly, Sam, Ilgenfritz Bldg.
Knott, Minerva, E. 7th St.
Love, J. G., M. K. & T. Hosp.
McNeil, G. E., M. K. & T. Hosp.
Mitchell, J., Lookout.
Morley, Frank R., 1003 E. 5th St.
Martin, John G., 700 E. Broadway.
Overstreet, W. C., 312 S. Ohio.
Prowell, J. D., Longwood.
Parkhurst, C. L., Houstonia.
Sutton, F. L., Hoffman Bldg.
Shirk, W. S., Hoffman Bldg.
Sands, M. L., Cole Camp.
Simonds, Wallace, Katy Bldg.
Trader, J. W., 5th & Ohio.
Tyler, R. S., Dunksburg.
Titsworth, G., 508 S. Ohio.
Tucker, A. J., Ilgenfritz Bldg.
Wood, E. A., Hoffman Bldg.
Yancey, E. F., M. K. & T. Hosp.

PHELPS COUNTY.

B. T. SMITH, President. S. L. BAYSINGER, Secretary.

MEMBERS.

Baysinger, S. L., Rolla.
Breuer, W. H., St. James.
Cowan, R. B., Edgar Springs.
Gowin, O. G., St. James.
Johnson, R. L., Rolla.
Rowe, Samuel B., Rolla.
Short, Martha J., Rolla.
Smith, B. T., Newburg.

PIKE COUNTY.

M. O. BIGGS, President. T. GUY HETHERLIN, Secretary.

MEMBERS.

Biggs, M. O., Bowling Green.
Brown, D. T., Novinger.
Hetherlin, T. Guy, Louisiana.
Kennedy, J. J., Frankford.
Shelton, J. C., New Hartford.
Tinsley, G. N., Bowling Green.

PLATTE COUNTY.

ROBERT P. DAVIS, President. GRUNDY C. COFFEY, Secretary.

MEMBERS.

Barr, A. C., Linkville.
Chastain, C. H., Weston.
Coffey, E. McD., Platte City.
Coffey, G. C., Platte City.
Davis, R. P., Woodruff.
Dinwiddie, F. G., Camden Point.
Hale, J. M., Dearborn.
Herndon, A. S., Camden Point.
Moore, M. H., Dearborn.
Murray, E. W., Kansas City.
Patterson, Henry H., Edgerton.
Redman, Spence, Platte City.
Smedley, W. H., Weston.
Swaney, W. D., Linkville.
Wilson, R. P. C., Platte City.

PULASKI COUNTY.

W. L. REAGAN, President. G. W. ORRICK, Secretary.

MEMBERS.

Carter, W. C., Dixon.
Claiborn, D. R., Waynesville.
Harrison, R. T., Dixon.
Murphy, H. C., Richland.
Oliver, Everett A., Richland.
Orrick, G. W., Crocker.
Reagan, W. L., Richland.
Rolens, M. F., Dixon.
Stebbins, N. I., Crocker.
Thume, Geo. W., Richland.
Tice, L., Waynesville.

PUTNAM COUNTY.

C. H. CARRYER, President. J. A. TOWNSEND, Secretary.

MEMBERS.

Carryer, C. H., Hartford.
Cozad, F. A., Powersville.
Ellis, A. D., Powersville.
Fretwell, W. J., Unionville.
Geisinger, E. J., Unionville.
Gray, L. L., St. John.
Haynes, Lee, Mendota.
Holman, J. H., Unionville.
McCutchen, J. E., Lemonville.
Montgomery, E. A., Unionville.
Noel, Frank, Unionville.
Nulton, Ida M., Livonia.
Rice, F. D., Lucerne.
St. John, R. L., Howland.
Townsend, J. A., Unionville.

RALLS COUNTY.

W. L. BIRNEY, President. T. J. DOWNING, Secretary.

MEMBERS.

Birney, W. L., Oakwood.
Downing, T. J., New London.
Downing, S. W., Perry.
Graves, C. H., Center.
Horwood, W. S., Rensselear.
Hendrix, W. G., New London.
Miles, A. W., Perry.
Moore, F. M., Perry.
Monroe, Thos., Center.
McCullom, R. W., Center.
Ragen, Sam., New London.
Walter, Fred. E., Perry.
Waters, Thos. E., New London.
Wix, F. M., Center.
Winn, Marven, Saverton.

RANDOLPH COUNTY.

G. O. CUPPAIDGE, President. W. M. DICKERSON, Secretary.

MEMBERS.

Adams, S. C., Huntsville.
Barnhart, D. A., Huntsville.
Brown, A. J., Higbee.
Clapp, C. B., Moberly.
Cuppaidge, G. O., Moberly.
Dickerson, W. M., Renick.
McCormack, Frank, Darksville.
Mangus, T. D., Moberly.
Mangus, C. W., Moberly.
Magee, W. K., Moberly.
Nichols, G. W., Higbee.
Rafter, J. G., Huntsville.
Shrader, E. W., Moberly.
Touls, S. P., Jacksonville.
Woods, R. A., Clark.

RAY COUNTY.

L. D. GREENE, President. E. P. HIGDON, Secretary.

MEMBERS.

Craven, Y. D., Lawson.
Cook, T. B., Rayville.
Crowley, C. C., Richmond.
Gosney, C. W., Kansas City.
Greene, L. D., Richmond.
Grimes, M., Hardin.
Hamilton, R. L., Richmond.
Higdon, E. F., Richmond.
McGaugh, E. T., Richmond.
Mussen, E. H., Rockingham.
Sevier, R., Richmond.
Shotwell, C. B., Richmond.
Sheets, Robt., Orrick.
Smith, James W., Richmond.

REYNOLDS COUNTY.

J. M. LOWERY, President. T. W. CHILTON, Secretary.

MEMBERS.

Chilton, T. W., Corridon.
Cloonan, M., Ruble.
Copeland, W. A., Ellington.
Lowery, J. M., Centerville.
McKenzie, D. H., Lesterville.
Moffitt, J. H., Redford.
Moore, J. H., Centerville.
O'Dell, T. T., Ellington.

RIPLEY COUNTY.

S. A. PROCTOR, President. J. F. REDWINE, Secretary.

MEMBERS.

Cordrey, H. D., Poynor.
Kerr, Wesley B., Doniphan.
Proctor, S. A., Doniphan.
Redwine, J. F., Doniphan.

SALINE COUNTY.

D. C. GORE, President. D. F. BELL, Secretary.

MEMBERS.

Bell, D. F., Marshall.
Chastain, M. T., Marshall.
Crank, A. C., Herndon.
Gore, D. C., Marshall.
Hall, J. R., Marshall.
Harris, J. E., Marshall.
Howard, F. A., Slater.
Spotts, B. M., Marshall.
Shuck, L. I., Nelson.

SCHUYLER COUNTY.

E. L. MITCHELL, President. H. E. GERWIG, Secretary.

MEMBERS.

Bridges, J. B., Downing.
Gerwig, H. E., Downing.
Jones, J. T., Queen City.
Justice, W. F., Lancaster.
Keller, J. H., Glenwood.
Mitchell, E. L., Lancaster.
Mitchell, W. F., Lancaster.
Rambo, J. H., Glenwood.
Potter, B. B., Lancaster.

SCOTLAND COUNTY.

W. E. ALEXANDER, President. O. F. PILE, Secretary.

MEMBERS.

Alexander, W. E., Memphis.
Bondurant, W. E. H., Memphis.
Davis, A. L., Arbela.
Johnson, F. M., Gorin.
Mackey, A. H., Gorin.
Maynard, Geo. K., Hitt.
Parrish, E. E., Memphis.
Parrish, J. E., Memphis.
Pile, O. F., Memphis.
Platter, A. E., Memphis.

SHELBY COUNTY.

H. C. VAUGHAN, President. A. M. WOOD, Secretary.

MEMBERS.

Carson, Wm., Shelbyville.
Chapman, Chas., Shelbina.
Dallas, L. W., Hunnewell.
Devin, J. F., Shelbyville.
Dobson, D. A., Hunnewell.
Owen, W. W., Oak Dale.
Pollard, H. M., Shelbina.
Read, N. M., Clarence.
Smith, J. D., Shelbina.
Vaughan, H. C., Shelbina.
Wood, A. G., Lentner.
Wood, A. M., Lentner.

STE. GENEVIEVE COUNTY.

M. ANDRE, President. F. E. HINCH, Secretary.

MEMBERS.

Andre, M., Ste. Genevieve.
Counts, H. L., Avon.
Hinch, F. E., Ste. Genevieve.
Lanning, R. W., Ste. Genevieve.
Meyer, A. G., Ste. Genevieve.
Moore, C., St. Marys.
Morganstein, H. J., Weingarten.
Rutledge, G. M., Ste. Genevieve.

ST. CHARLES COUNTY.

J. R. MUDD, President. B. K. STUMBERG, Secretary.

MEMBERS.

Baller, H., Cottleville.
Bitter, Carl, St. Charles.
Bruere, John, St. Charles.
Corley, H. N., St. Paul.
Dunn, F. P., St. Peters.
Gossow, A., St. Charles.
Hardy, Wm. F., St. Charles.
Morgner, O., St. Charles.
Mudd, J. R., St. Charles.
Muhm, O. A., New Melle.
Stumberg, B. K., St. Charles.
Tainter, E. J., St. Charles.
Wentker, B. P., St. Charles.

ST. CLAIR COUNTY.

W. CLINE, President. E. D. MILES, Secretary.

MEMBERS.

Bell, W. E., Osceola.
Cline, W., Appleton City.
Edmondson, M. T., Iconium.
Follin, E. D., Collins.
Landaker, C. L., Collins.
Miles, E. D., Osceola.
Moorehouse, Emma, Appleton City.
Pingrey, W. B., Ralston, Okla.
Seevers, John, Osceola.
Selvidge, L. B., Collins.
Sheldon, T. J., Lowry City.
Smith, R. J., Appleton City.
Sullivan, E. W., Osceola.
Taylor, W. E., Ohio P. O.
Williams, D. B., Osceola.
Wright, Leo S., Lowry City.

ST. LOUIS COUNTY.

H. G. WYER, President. H. T. RANDLE, Secretary.

MEMBERS.

Armstrong, C. L., Webster Grove.
Bates, Conway, Clayton.
Berry, J. M., Webster Grove.
Campbell, A. V., Glendale.
Coleman, H. T., Pattonville.
Dalton, Martin, Fenton.
Denny, R. B., Eureka.
Douglass, J. T., Ferguson.
Dunnavant, C. A., Kirkwood.
Eatherton, J. W., Allenton.
Forsythe, Robert C., Kirkwood.
Gallagher, J. C., Valley Park.
Greensfelder, H. B., Kirkwood.
Gulbor, F. E., Maplewood.
Ham, W. J., Creve Coeur.
Higgins, R. M., Webster Grove.
Jensen, N. N., Florissant.
Kinner, Wm., Ferguson.
Loving, S. R., Pond.
Moore, R. D., Central.
Pfister, J. D., Fern Ridge.
Pitman, John, Kirkwood.
Randle, H. T., Clayton.
Reynolds, S. H., Maplewood.
Thurman, E. J., Fenton.
Townsend, W. H., Maplewood.
Wyer, H. G., Kirkwood.

ST. LOUIS CITY.

FRANK L. HENDERSON, President. T. A. HOPKINS, Secretary.

MEMBERS.

Abeken, F. W., 3531 S. Broadway.
Albrecht, F. H., 3763 Westminster Pl.
Allison, N., Linmar Bldg.
Allyn, A. B., 3136 Morganford Road.
Alt, A., 3036 Locust St.
Althans, Carl, 2848 Accomac St.
Ambrose, A. O., 313 N. 9th St.
Ameiss, F. C., Vanol Bldg.
Amyx, R. F., 1943 N. 11th St.
Amerland, J. H., 2739 Chippewa St.
Apperson, E. L., 536 N. Taylor Ave.
Atkins, H. S., Insane Asylum.
Atkinson, R. C., 3002 Lafayette Ave.
Aufderheide, W. D., 2754 Arsenal St.
Auler, H. A., 2708 Lynch St.
Ayars, T. R., 3739 Easton Ave.
Babler, E. A., 617 Euclid Ave.
Bailey, F. W., City Hospital.
Baker, R. W., 1438 Pendleton Ave.
Ball, J. M., 3509 Franklin Ave.
Ball, O. F., Linmar Bldg.
Barck, C., 2715 Locust St.
Barclay, R., 3894 Washington Ave.
Bardenheier, F. G. A., City Hospital.
Barnard, A. L., 2931 Easton Ave.
Barnes, A. S., 5434 Maple Ave.
Barnes, A. S., Jr., Mo. Trust Bldg.
Barnes, R. H., 412 Sarah St.
Bartlett, W., 4257 Washington Ave.
Bauduy, W. K., 2808 Olive St.
Bauer, C. E., 2104 N. 14th St.
Baumgarten, G., Humboldt Bldg.
Baumgarten, W., Humboldt Bldg.
Becker, W. H., 4743 Labadie Ave.
Bedal, A. C., 3418 Lucas Ave.
Behrens, L. H., 5 S. Broadway.
Bishop, F. L., 516 N. Garrison Ave.
Black, W. D., 1411 California Ave.
Blair, V. P., Linmar Bldg.
Bles, V. A., Linmar Bldg.
Bliss, M. A., 3561 Olive St.
Block, Robt. C., Linmar Bldg.
Bock, A. F., 1107 N. Grand Ave.
Boisliniere, L. C., 3533 Olive St.
Boehm, J. L., 3806 Delmar Ave.
Bond, H. W., Linmar Bldg.
Bond, Y. H., 315 N. Grand Ave.
Boogher, F., High & Carr Sts.
Boogher, J. L., Mo. Trust Bldg.
Booth, D. S., Linmar Bldg.
Borck, Edw., 3916 N. 20th St.
Bradley, A. H., 1019 N. 21st St.
Brady, J. M., 1467 Union Blvd.
Brandenberger, L. A., 2900 Eads Ave.
Breed, M. E., 1018 Hamilton Ave.
Bremer, L., 3723 W. Pine.
Bribach, B., 7608 Michigan Ave.
Broderick, J. K., Vanol Bldg.
Brokaw, A. V. L., 536 N. Taylor Ave.
Brooks, H. S., 3557 Lafayette Ave.
Broome, G. W., 612 N. Taylor Ave.
Brown, J. Y., City Hospital.
Bryan, W. M. C., 3858 Westminster Pl.
Buck, T. E., 2610 S. 26th St.
Buckwalter, J. C., Century Bldg.
Burford, C. E., 932 Hamilton Ave.
Burnett, D. C., 2602 N. Taylor Ave.
Burnett, E. C., Century Bldg.
Burns, R., 4500 Olive St.
Cadwallader, I. H., 919 N. Taylor Ave.
Campbell, G., 3429 Morgan St.
Campbell, O. H., 614 N. Compton Ave.
Cape, L. W., Sutton & Hazel.
Caplan, L., 4500 Olive St.
Carley, H. D., 3419 Bell Ave.
Carman, R. D., 4318 Olive St.
Carson, N. B., Humboldt Bldg.
Carson, G. W., 301 Century Bldg.
Chaddock, C. G., 3750 Lindell Bl.
Chapman, H. N., 3821 Delmar Ave.
Clark, W. J., Maysville, Mo.
Clemens, Jas., 3720 Pine St.
Clopton, M. B., Humboldt Bldg.
Cobb, C. D., Neponsette, Mass.
Colassowitz, A., Olivia Bldg.
Connolly, P. D., 2556 N. Grand Ave.
Cooney, D. C., 4247 Finney Ave.
Crandall, G. C., 4287 Olive St.
Creveling, H. C., 219 N. Sarah St.
Crossen, H. S., 4477 Delmar Ave.
Cummings, H. J., 1200 N. Grand Ave.
Curl, J. L., 2901 Clifton Ave.
Dalton, H. C., 3536 Easton Ave.
Davis, L. H., 1017 Park Ave.
Davis, W., 5013a Page Ave.
Dean, J. M., 319 N. Grand Ave.
Deutsch, W. S., 3135 Washington Ave.
Dickerson, W. L., 5443 Washington Ave.
Dorsett, Walter B., Linmar Bldg.
Dorsey, B. L., 1422 N. Taylor Ave.
Drace, C. C., City Dispensary.
Draper, N. M., 3300 Washington Ave.
Dudley, C. R., Linmar Bldg.
Duncan, J. H., Humboldt Bldg.
Eberlein, E. W., 1208 Dillon St.
Ehrhardt, R. T., Century Bldg.
Ehrenfest, H., Vanol Bldg.
Elbrecht, O. H., Female Hospital.
Engman, M. F., Humboldt Bldg.
Epstein, M. J., 1905 N. 11th St.
Ewing, F. C., Century Bldg.
Eyermann, E. H., 1800 S. Broadway.
Faber, J. E., 2123 S. 26th St.
Fahlen, F., 116 N. Grand Ave.
Falk, J. C., 2701 Stoddard St.
Ferrel, H. E., 822 N. Grand Ave.
Fisch, C., 3212 Pine St.
Fischel, W. E., Humboldt Bldg.
Fischer, W., 3554a Olive St.
Fleming, A. W., 4130 Manchester Road.
Forster, O. E., Carleton Bldg.
Forster, D., 6209 Easton Ave.
Fowler, S. R., Carleton Bldg.
Fox, S. D., 2846 Manchester.
Frankenthal, M., 4163 McPherson Ave.
Freudenstein, W. H., 3836 Clark Ave.
Freund, N. M., 1440 S. 18th St.
Friedman, J., 308 N. 6th St.
Frielingsdorf, E. H., 2202 S. Broadway.
Fry, F. R., Humboldt Bldg.
Fuchs, W. H., 2830 Lafayette Ave.
Fuhrmann, R. H., 3221 California Ave.
Fulton, A. L., 617 Chouteau Ave.
Funkhouser, R. M., 4354 Olive St.
Furney, E. E., 3417 Morgan St.
Gamble, D. C., 644 Century Bldg.
Garstang, D. B., Linmar Bldg.
Gayler, W. C., 3904 Laclede Ave.
Gehrung, E. C., Linmar Bldg.
Geitz, H. A., Humboldt Bldg.
Gellhorn, Geo., Linmar Bldg.
Glasgow, F. A., 3894 Washington Ave.
Glasgow, W. C., 2847 Washington Ave.
Goebel, A., 3508 Manchester.
Goldstein, M. A., 3858 Westminster Pl.
Golland, M., 1712 Carr St.
Goodloe, H., Vanol Bldg.
Goodwin, E. J., Linmar Bldg.
Gradwohl, R. B. H., 5001 Fairmount Ave.
Graham, I. E., 1417 Newstead Ave.
Graham, T. E., City Hospital.
Grant, J. M., 4132 Easton Ave.
Graves, S. C., 3603 Lindell Bl.
Graves, W. W., Vanol Bldg.

Green, John, Jr., Vanol Bldg.
Greer, E. O., 2750 Park Ave.
Griffin, P. H., 2730 Washington Ave.
Grindon, Joseph, 3894 Washington Ave.
Gross, J. H., 306 Oriel Bldg.
Grote, W. F. H., 1225 Sullivan Ave.
Guhman, J. O., 2603 Olive St.
Guhman, M. J., 3505 N. 26th St.
Guhman, Chas., N. 43rd & Finney Ave.
Haase, M. E., 1105 S. 7th St.
Hall, Willis, Humboldt Bldg.
Hall, H. R., 925 Goodfellow Ave.
Hallam, J. C., Mermod-Jaccard Bldg.
Hardaway, W. A., Lister Bldg.
Harnisch, H. D., 2407 S. 18th St.
Harris, D. L., 926 Academy St.
Harris, R. C., 1303 N. Garrison Ave.
Hartwig, O. A., 927 Market St.
Hawley, N. J., Century Bldg.
Hawley, T. S., 3065 Easton Ave.
Helwig, H. J., 2804 Manchester Ave.
Hempel, Max, 3857 N. Grand Ave.
Henckler, E. H., 2237 Chouteau Ave.
Henderson, F. L., Humboldt Bldg.
Henke, A. F., 2210 Howard St.
Hennerich, J. P., 2921 S. Broadway.
Herchenroeder, L. C., 2904 Park Ave.
Hermann, H. W., 1127 N. Grand Ave.
Heuer, Phil H., 303 N. Grand Ave.
Heyer, C., 910 N. 10th St.
Higbee, E. H., 4952 Park View Pl.
Hill, R., 4605 Delmar Ave.
Hirschi, W. T., 2217 N. Grand Ave.
Hochderfer, D. F., 308 N. 6th St.
Hoeffer, J. P., 2304 S. Compton Ave.
Hoffman, P., 3337 Washington Ave.
Hoge, M. W., Linmar Bldg.
Holtgrewe, F. W., 1601 Blair Ave.
Homan, G., Odd Fellows Bldg.
Hopkins, M. J., 3400 Olive St.
Hopkins, T. A., 319 Century Bldg.
Horwitz, M. R., 3000 Olive St.
Houser, K., Century Bldg.
Houck, E. F., 1638 S. 26th St.
Houck, L., 903 Morrison Ave.
Houwink, J. J., 795 Bayard Ave.
Howard, A. P., Linmar Bldg.
Hughes, C. H., 3872 Washington Ave.
Hypes, B. M., 2005 Victor St.
Jacobson, H., Mo. Trust Bldg.
James, J. A. J., Carleton Bldg.
Jeuda, J. J., 2521 S. Broadway.
Jennings, J. E., Carleton Bldg.
Jennings, M. D., 4101 Washington Ave.
Johnson, E. H., 2507 N. Spring Ave.
Johnson, F. P., 3744 Finney Ave.
Johnson, W. L., 2241 S. Grand Ave.
Johnson, H. McC., Linmar Bldg.
Jonas, E., 4474 Westminster Pl.
Jones, M. D., 4068 Washington Ave.
Jordan, A. P., 2755 Osage St.
Kane, R. E., 1123 N. Grand Ave.
Keber, J. B., 448 Century Bldg.
Keeble, R. R., M. Pac. Hospital.
Keith, W. F., Carleton Bldg.
Kessler, E. H., 3446 Shenanadoah Ave.
Kennedy, W. U., 18th & Cass Ave.
Kieffer, A. R., 4268 W. Belle Pl.
Kieffer, Victor B., City Hospital.
Kier, W. F., 3609 Lindell Bl.
Kimball, A. C., Grand & Franklin Ave.
Kirchner, W. G. C., 1211 N. Grand Ave.
Klein, S., 1921 N. Grand Ave.
Koch, J. V., City Hospital.
Koenig, G. W., 740 S. 4th St.
Koetter, A. F., 1023 N. Grand Ave.
Krebs, G. A., 2709 S. 11th St.
Krebs, F. J. V., 2816 N. 14th St.
Krenning, W. J., 4326 Easton Ave.
Kuhn, D., 1746 Chouteau Ave.
Laidley, L. H., 308 N. 6th St.
Lange, A. F., 2755 Osage St.
Langan, W. J., Plymouth & Goodfellow Aves.
Lare, H. S. P., 4552 Morgan St.
Larew, J. L., 3030 Morgan St.
Lawrence, W. S., 1913 N. Grand Ave.
Lebrecht, J. C., 900 S. 4th St.
Leighton, W. E., 926 Academy Ave.
Lemen, J. R., Vanol Bldg.
Lewis, Bransford, 627 Century Bldg.
Lewis, Chas., 1402 Monroe St.
Levy, A., Lister Bldg.
Lightner, C. R., 2313 Washington Ave.
Link, J. J., Mermod-Jaccard Bldg.
Lippe, M. J., 4321 W. Belle Pl.
Lischer, R. F., Mt. Olive, Ill.
Loeb, C., Humboldt Bldg.
Loeb, H. W., Humboldt Bldg.
Long, J. M., 513 Sarah St.
Luedeking, R., 1837 Lafayette Ave.
Luton, L. S., 1023 N. Grand Ave.
Lutz, F. J., 1630 S. Grand Ave.
Lyman, H., Carleton Bldg.
Mann, F. P., 1536 Papin St.
Mardorf, W. C., 1111 Chouteau Ave.
Marks, H., 2930 Morgan St.
Martin, T. A., Century Bldg.
Marx, Ella, 4269 Delmar Ave.
Max, C. O. C., 2747 Lafayette Ave.
McCandless, W. A., 3857 Westminster.
McClure, J., 1702 Market St.
McKay, H. S., 2643 Geyer.
McLean, Mary H., 4339 Delmar Bl.
Meisenbach, A. E., Jefferson Bldg.
Meisenbach, A. H., 2229 S. Broadway.
Melvin, J. M., 3205 Washington Ave.
Menestrina, J. F., 3409 Washington Ave.
Meng, E. R., 728 N. Taylor Ave.
Meyer, H. H., 1823 N. Taylor Ave.
Miller, H. E., 2257 Missouri Ave.
Miller, J. J., 4439 Morgan St.
Mills, R. Walter, 2235 S. Vandeventer Ave.
Missimore, L. E., 1823 N. Taylor Ave.
Mook, W. H., 2602 Locust St.
Moore, B. W., 3634 Washington Ave.
Moore, H. M., Linmar Bldg.
Moore, J. G., 5259 Page Bl.
Moore, J. W., 906 Pine St.
Moore, W. G., 86 Vandeventer Pl.
Morfit, J. C., 5101 Morgan St
Morris, C. C., 2945 Franklin Ave.
Mosby, C. V., 2313 Washington Ave.
Mudd, H. G., Humboldt Bldg.
Mueller, E., 3334 California Ave.
Muetze, Henry, 3201 Shenandoah Ave.
Murphy, J. C., 4263 Morgan St.
Murphy, R. B., 6035 Manchester Ave.
Myer, J. S., 3894 Washington Ave.
Neuhoff, F., 1318 Chouteau Ave.
Newman, L. E., 449 Century Bldg.
Nicholson, C. M., Lister Bldg.
Nicks, H. G., 933 Goodfellow Ave.
Nietert, H. L., Century Bldg.
Nifong, F. G., Columbia, Mo.
Norris, E. J., 4323 Russell Ave.
North, E. P., 3920 Russell Ave.
Ohmann-Dumesnil, A. H., 5 S. Broadway.
O'Reilly, R. J., 602 N. 7th St.
Orr, C. J., 3343 Morgan St.
Outten, W. B., Mo. Pac. Hospital.
Padberg, L. R., 2759 Armand.
Parker, C. W., 3502 N. Jefferson Ave.
Patton, F. W., 5617 Maple Ave.
Pfeiffenberger, J. M., Humboldt Bldg.
Phillips, G. M., 520 Olive St.
Pierce, H. M., 4046 N. Grand Ave.
Pim, L. T., Mo. Trust Bldg.
Pollman, L. P., 2002 St. Louis Ave.
Popper, M., Mermod-Jaccard Bldg.
Porter, Wm., 520 Olive St.
Porterfield, E. P., 4635 Easton Ave.
Post, H. M., 27th & Washington Ave.
Powell, C. H., Century Bldg.
Pritchard, J. B., 3203 Easton Ave.
Printz, H., Century Bldg.
Rassieur, L., City Hospital.
Ravold, A., 312 Century Bldg.
Reder, F., 4629 Cook Ave.

Remme, C. F., 400 S. 14th St.
Rice, D. F., Century Bldg.
Riesmeyer, L. T., 2838 Lafayette Ave.
Riley, C. M., Alton, Ill.
Riley, R. D., 4641 Washington Ave.
Ring, Frank, Chemical Bldg.
Robinson, A. C., 5083 Westminster Pl.
Robertson, W. M., 2608 Locust St.
Rohlfing, C. G., 1200 N. 8th St.
Rohlfing, H. A. L., 2602 Laclede Ave.
Rohlfing, L. C., 3914 Maffit Ave.
Rosebrough, F. H., Grand & Bell Aves.
Ross, J. B., 1908 E. Grand Ave.
Rothstein, H. B., 3309 S. 13th St.
Rule, J. B., Olivia Bldg.
Rumbold, F. M., 450 Century Bldg.
Rush, W. M., 805 N. Grand Ave.
Rusk, E. E., 2945 Lawton.
Russler, J. J., 2622 S. Jefferson Ave.
Salter, J. C., 520 N. Grand Ave.
Sauer, W. E., Olivia Bldg.
Saunders, E. W., 3003 Lafayette Ave.
Saxl, Ernst, Century Bldg.
Scherck, H. J., 403 Century Bldg.
Schisler, E., 2027 S. Jefferson Ave.
Schlossstein, A. G., 3153 Longfellow.
Schlueter, R. E., 720 S. 4th St.
Schmalhorst, D. E., 3111 N. Broadway.
Schmidt, W. C., 2417 S. Broadway.
Scholz, P., 3403 N. 14th St.
Scholz, R. P., 1110 Ferry St.
Schuehat, W. L., 2200 Chouteau Ave.
Schulte, F. A., 2447 N. Spring Ave.
Schulz, H. W., 2603 Cherokee Ave.
Schwab, S. I., Vanol Bldg.
Schwarz, H., 440 N. Newstead Ave.
Schwarze, A., 2921 S. Jefferson Ave.
Shanklin, Ben, 2734 Chouteau Ave.
Shapleigh, J. B., 2608 Locust St.
Sharpe, N. W., 3520 Lucas Ave.
Shattinger, C., 2924 S. Grand Ave.
Shields, W. B., Linmar Bldg.
Shoemaker, J. F., Carleton Bldg.
Shoemaker, W. A., 1006 Carleton Bldg.
Shutt, C. H., City Hospital.
Senseney, E. M., 2829 Washington Ave.
Sieving, H. J. C., 1125 St. Louis Ave.
Simon, J. H., 4104 Manchester Ave.
Sluder, G., 2647 Washington Ave.
Smith, Elsworth, 116 N. Grand Ave.
Smith, J. C., 3634 Washington Ave.
Smith, J. W., Mermod-Jaccard Bldg.
Snodgrass, C. A., 1624 Chestnut St.
Soper, H. W., 813 N. 18th St.
Spain, K. C., Carleton Bldg.
Spencer, H. N., 2723 Washington Ave.
Spiegelhalter, J., 2166 Lafayette Ave.
Spooner, E. H., 1116 Talmage Ave.
Stahl, S. S., 4500 Olive St.
Stauffer, W. H., Humboldt Bldg.
Steedman, J. G. W., 2803 Pine St.
Steer, J., 3126 Washington Ave.
Stevens, C. D., 1749 S. Grand Ave.
Stewart, F., 1001 Olive St.
Stocking, L. C., 1304 Academy Ave.
Stockwell, B. E., 2345 S. Broadway.
Suggett, O. L., 423 Commercial Bldg.
Summa, Hy. H., 3707 N. 11th St.
Summa, Hugo, 2249 St. Louis Ave.
Sutter, O., Century Bldg.
Stoffel, R. J., 2754 Armand Ave.
Talbott, H., 3153 Laclede Ave.
Tanquary, J. H., 930 Belt Ave.
Taussig, A. E., 3519 Washington Ave.
Taussig, F. G., 534 N. Vandeventer.
Tiedemann, E. F., 2253 S. Vandeventer.
Todd, D. C., 4115 Finney Ave.
Tooker, Chas. W., Jr., 4326 Pine St.
Trotman, C. A., 3524 Lawton Ave.
Tuholske, H., 465 N. Taylor Ave.
Tuholske, M. C., Female Hospital.
Tupper, P. Y., 534 N. Vandeventer Ave.
Tuttle, G. M., 3509 Morgan St.
Valle, J. F., 3303 Washington Ave.
Vandover, S. T., 1536 Papin St.
Vasterling, Paul, Mo. Pac. Hospital.
Vaughan, J. W., 4001 W. Belle Pl.
Viedt, E. J., 2251 S. Grand Ave.
Vitt, Rudolph, 3860 S. Broadway.
Vogler, A. F., 2037 Fair Ave.
Vogt, G. W., 1455 Blair Ave.
Vogt, W. H., 1455 Blair Ave.
Vollmer, P., 2358 S. 12th St.
Von der Au, O. L., 1301 Geyer Ave.
Vosberg, C. A., Centenary Hospital.
Ward, E. P., 2831 Shenandoah Ave.
Ware, Chas., 1404 Olive St.
Warfield, L. M., Chemical Bldg.
Weinsberg, H. A., 1015 Marion St.
Weiterer, H. L., 2728 N. 11th St.
Wesseler, F. W., 2308 Gravois Ave.
Whelpley, H. M., 2342 Albion Pl.
Wiatt, W., East St. Louis, Ill.
Wichmann, H. L., 1418 S. 17th St.
Wiener, M., 500 Carleton Bldg.
Wilkes, B. A., Linmar Bldg.
Williamson, J. W., 5600 Cates Ave.
Williamson, L. P., 5600 Cates Ave.
Wilson, A., 1514 Wagoner Pl.
Wilson, R. E., 512 Mo. Trust Bldg.
Wilson, W. A., 1536 Papin St.
Winter, Wm., 3632 S. Broadway.
Witherspoon, T. C., 4318 Olive St.
Wolfner, H. L., Carleton Bldg.
Woodruff, F. E., 2925 Washington Ave.
Wyche, Chas., 401 N. Grand Ave.
Zahorsky, John, 1460 S. Grand Ave.
Zoller, C. H., 1235 N. Grand Ave.

STODDARD COUNTY.

D. R. CORBIN, President. JNO. ASHLEY, Secretary.

MEMBERS.

Allen, T. C., Bernie.
Ashley, John, Bloomfield.
Bilbrey, F. H., Puxico.
Brandon, J. P., Essex.
Burris, L., Puxico.
Caldwell, W. C., Essex.
Corbin, D. R., Bloomfield.
Douglas, Jno., Dexter.
Evans, S. M., Bloomfield.
Hill, A. D., Dexter.
LaRue, Harry, Dexter.
Moore, Ed., Bloomfield.
Phillips, Eldon, Bloomfield.
Tiller, J. A., Leora.
Vernon, Geo., Dexter.
Wilson, Eli, Leora.
Wingo, T. B., Dexter.

SULLIVAN COUNTY.

J. C. KESSINGER, President. J. S. MONTGOMERY, Secretary.

MEMBERS.

Helton, J. W., Green City.
Kessinger, J. C., Milan.
Mairs, E. J., Newtown.
Montgomery, J. S., Milan.
Porter, E. S., Milan.
Widner, A. W., Newtown.
Witter, W. L. M., Milan.

VERNON COUNTY.

H. C. JARVIS, President. T. B. TODD, Secretary.

MEMBERS.

Adams, W. T., Richards.
Buchanan, J. Robt., Nevada.
Bohannon, W. T., Nevada.
Churchill, E. R., Nevada.
Craig, T. B. M., Nevada.
Callaway, L. H., Nevada.
Davis, C. B., Walker.
Johnson, S. A., Nevada.
Jarvis, H. C., Shell City.
Keithly, C. L., Nevada.
Milikan, G. S., Shell City.
McLemore, T., Nevada.
Popplewell, W. H., Sheldon.
Robinson, J. F., Nevada.
Smith, A. P., Metz.
Todd, T. B., Richards.
Truex, J. L., Milo.
Wilson, G. C., Nevada.
Yater, J. M., Nevada.

WARREN COUNTY.

W. J. ALEXANDER, President. E. A. FLUESMEIER, Secretary.

MEMBERS.

Alexander, W. J. Marthasville.
Dyer, J. H., Warrenton.
Foreman, J., Warrenton.
Fluesmeier, E. A., Wright City.
Graham, A. W., Warrenton.
McKinney, Geo. F., Warrenton.
Mitchell, E. G., Wright City.
Stewart, James, Holstein.

WASHINGTON COUNTY.

J. A. EATON, President. W. S. SMITH, Secretary.

MEMBERS.

Eaton, J. A., Belgrade.
Ford, David, Richwoods.
Hall, Jas. H., Potosi.
Hall, L. T., Potosi.
Parker, W. H., Anthonies Mills.
Parker, W. J., Berryman.
Smith, W. S., Belgrade.
Townsend, J. P., Potosi.

WAYNE COUNTY.

J. P. SEBASTIAN, President. R. J. OWENS, Secretary.

MEMBERS.

Atkins, F. R., Jackson.
Bailey, W. S., Leeper.
Barnett, I. N., Piedmont.
Bates, S. A., Piedmont.
Gilmer, J. E., Piedmont.
Hale, Jesse W., Greenville.
Jones, C. H., Brunot.
Montgomery, J. M., Lowndes.
Owens, R. J., Mill Spring.
Sebastian, J. P., Patterson.
Sheets, C. C., Greenville.
Toney, G. W., Piedmont.

WORTH COUNTY.

O. P. M. MILLS, President. J. K. PHIPPS, Secretary.

MEMBERS.

Andrews, John, Grant City.
Dove, J. D. F., Allendale.
Gately, Villa, Grant City.
Long, A. C., Denver.
McKinley, W. E., Grant City.
Mills, H. P., Sheridan.
Mills, O. P. M., Grant City.
Nesbitt, E. P., Sheridan.
Phipps, J. K., Grant City.
Robertson, W. A., Allendale.
Smith, T. J., Grant City.

COUNTY SOCIETIES IN AFFILIATION WITH THE STATE MEDICAL ASSOCIATION.

County.	President.	Address of President.	Secretary.	Address of Secretary.
Adair	James Hanks	Brashear	E. C. Grim	Kirksville.
Andrew	D. B. Bryant	Savannah	C. O. Jeffries	Savannah.
Atchison	W. G. Stafford	Tarkio	A. McMichael	Rockport.
Audrain	C. A. Rothwell.	Mexico	E. S. Cave	Mexico.
Barton	G. D. Allee	Lamar	J. L. McComb	Lamar.
Bates	A. E. Lyle	Butler	E. N. Chastain	Rich Hill.
Benton	G. S. Greeson	Lincoln	S. O. Davis	Warsaw.
Boone	J. E. Thornton	Columbia	W. A. Norris	Columbia.
Buchanan	P. I. Leonard	St. Joseph	Chas W Fassett	St. Joseph.
Butler	W. A. Kendall	Poplar Bluff	J. J. Norwine	Poplar Bluff.
Caldwell	R. K. Dodge	Palo	Tinsley Brown	Hamilton.
Callaway	J. F. Harrison	Fulton	Martin Yates	Fulton.
Camden	G. M. Moore	Linn Creek	G. T. Myers	Macks Creek.
Cape Girardeau	H. L. Cunningham	Cape Girardeau	J. D. Porterfield, Jr.	Cape Girardeau.
Carroll	W. C. Baird	Bogard	R. F. Cook	Carrollton.
Carter-Shannon	F. Hyde	Eminence	J. A. Chilton	Van Buren.
Cass	R. D. Ramey	Garden City	J. S. Triplett	Harrisonville.
Charlton	H. C. Tatum	Brunswick	C. A. Jennings	Salisbury.
Clark	H. W. Harris	Winchester	A. C. Bridges	Kahoka.
Clay	L. J. Jones	Linden	F. H. Matthews	Liberty.
Clinton	John Sturgis	Perrin	E. A. Colley	Plattsburg.
Cole	J. P. North	Jefferson City	G. Ettmueller	Jefferson City.
Cooper	P. L. Hurt	Boonville	J. R. Lionberger	Boonville.
Crawford	W. A. Metcalf	Steelville	A. H. Horn	Steelville.
Davies	J. D. Dunham	Pattonsburg	M. A. Smith	Gallatin.
Dunklin	N. F. Kelley	Kennett	G. L. Johnson	Kennett.
Franklin	H. A. Booth	Pacific	A. C. Brown	Moselle.
Gasconade-Maries-Osage	J. J. Ferrell	Owensville	J. W. Nieweg	Lois.
Greene	W. P. Patterson	Springfield	Robt. M. Cowan	Springfield.
Grundy	N. E. Sutton	Trenton	W. H. Winningham	Trenton.
Harrison	A. H. Vandvert	Bethany	W. H. Wiley	Ridgeway.
Henry	W. M. Shankland	Clinton	F. M. Douglas	Clinton.
Holt	C. L. Evans	Oregon	J. F. Chandler	Forest City.
Howard	A. W. Moore	Fayette	C. W. Watts	Fayette.
Howell	J. W. Bingham	Pottersville	H. C. Shuttee	West Plains.
Iron	R. W. Gay	Ironton	Ira A. Marshall	Ironton.
Jackson	Robt. T. Sloan	Kansas City	Max Goldman	Kansas City.
Jasper	A. B. Freeman	Joplin	J. T. Stamey	Joplin.
Jefferson	W. H. Farrar	DeSoto	H. Will Elder	DeSoto.
Johnson	M. P. Shy	Knobnoster	E. H. Gilbert	Warrensburg.
Knox	L. S. Brown	Edina.	Henry J. Jurgen	Edina.
Laclede	J. M. Billings	Lebanon	J. A. McComb	Lebanon.
Lafayette	P. S. Fulkerson	Lexington	C. T. Ryland	Lexington.
Lincoln	S. R. McKay	Troy	Wm. P. Smith	Troy.
Linn	K. V. Stanley	Brookfield	D. F. Howard	Brookfield.
Livingston	David Gordon	Chillicothe	J. F. Cherrington	Chillicothe.
McDonald	E. F. Doty	Anderson	M. L. Sellers	Anderson.
Macon	W. H. Miller	Macon	C. W. Reagan	Macon.
Madison	G. W. Greenwood	Fredericktown	C. U. Davis	Fredericktown.
Marion	R. H. Goodier	Hannibal	F. Janet Reid	Hannibal.
Mercer	H. P. Chesmore	Princeton	C. R. Buren	Princeton.
Miller	S. P. Hickman	Ulman	G. D. Walker	Eldon.
Mississippi	P. P. Boggan	East Prairie	W. P. Howle	Charleston.
Moniteau	J. B. Stewart	Clarksburg	W. R. Patterson	Tipton.
Monroe	S. M. Brown	Monroe City	M. C. McMurry	Paris.
Montgomery	J. L. Jones	Jonesburg	W. M. Wheeler	High Hill.
Morgan	W. L. Hatler	Barnett	J. T. Beale	Versailles.
Newton	J. W. Lamson	Neosho	Horace Bowers	Neosho.
New Madrid	Welton O'Bannon	New Madrid	C. W. Watson	New Madrid.
Nodaway	F. R. Anthony	Maryville	L. E. Dean	Maryville.
Pemiscot	J. G. Luten	Caruthersville	John Johnson	Hayti.
Perry	T. M. Hudson	Perryville	F. M. Vessells	Perryville.
Pettis	W. C. Overstreet	Sedalia	W. J. Ferguson	Sedalia.
Phelps	W. H. Breuer	St James	S. L. Baysinger	Rolla.
Pike	M. O. Biggs	Bowling Green	T. Guy Hetherlin	Louisiana.
Platte	R. P. Davis	Woodruff	G. C. Coffey	Platte City.
Pulaski	W. L. Ragan	Richland	G. W. Orrick	Crocker.
Putnam	C. H. Carryer	Hartford	T. A. Townsend	Unionville.
Ralls	W. S. Harwood	Rensselaer	T. J. Downing	New London.
Randolph	G. O. Cuppaidge	Moberly	W. M. Dickerson	Renick.
Ray	L. D. Greene	Richmond	E. F. Higdon	Richmond.
Reynolds	J. M. Lowery	Centerville	T. W. Chilton	Corridon.
Ripley	S. A. Proctor	Doniphan	J. F. Redwine	Doniphan.
Saline	D. C. Gore	Marshall	D. F. Bell	Marshall.
St. Charles	J. R. Mudd	St. Charles	B. K. Stumberg	St. Charles.
St. Clair	W. Cline	Appleton City	E. D. Miles	Osceola.
Ste. Genevieve	M. Andre	St. Genevieve	F. E. Hinch	St. Genevieve.
St. Louis	F. L. Henderson	Century Bldg.	T. A. Hopkins	Century Building.
St. Louis Co.	H. G. Wyer	Kirkwood	H. T. Randle	Clayton.
Schuyler	J. T. Jones	Queen City	H. E. Gerwig	Downing.
Scotland	W. E. Alexander	Memphis	O. F. Pile	Memphis.
Shelby	H. C. Vaughn	Shelbina	A. M. Wood	Lentner.
Stoddard	D. R. Corbin	Bloomfield	Jno. Ashley	Bloomfield.
Sullivan	J. C. Kessenger	Milan	J. S. Montgomery	Milan.
Vernon	H. C. Jarvis	Schell City	T. B. Todd	Richards.
Warren	W. J. Alexander	Marthasville	E. A. Fluesmeier	Wright City.
Washington	J. A. Eaton	Belgrade	W. S. Smith	Belgrade.
Wayne	J. P. Sebastian	Patterson	R. J. Owens	Mill Spring.
Worth	O. H. P. Mills	Grant City	J. K. Phipps	Grant City.

MEETINGS OF COUNTY MEDICAL SOCIETIES.

County.	Date of Meeting.
Adair	Quarterly. Last Tuesday, Jan., April, July, Oct.
Andrew	Monthly. First Wednesday.
Atchison	Quarterly. January, April, July, October.
Audrain	Monthly. First Monday.
Barton	Quarterly. First Thursday, May, Aug., Nov., Feb.
Bates	Quarterly. Last Thursday in Feb., May, Aug. and Nov.
Boone	Monthly. First Monday.
Buchanan	Semi-Monthly. First and Third Saturday.
Butler	Weekly. Fridays.
Caldwell	Quarterly. July, October, January, April.
Callaway	Monthly. Second Thursday.
Camden	Quarterly. Second Monday, April, July, Oct. and Jan.
Cape Girardeau	Monthly. Second Wednesday.
Carroll	Monthly. Second Tuesday.
Carter-Shannon	Quarterly. February, May, August, and November.
Cass	Quarterly. First Thursday of March, June, Sept. and Dec.
Charlton	Monthly. Last Thursday.
Clark	Bi-Monthly. First Mondays, Feb., April, June, Aug., Oct., Dec.
Clay	Monthly. Last Monday.
Clinton	Monthly. First Tuesday.
Cole	Quarterly. Second Thursday of Jan., April, July, Oct.
Cooper	Monthly. First Tuesday.
Crawford	Quarterly. First Tuesday, April, July, October, January.
Daviess	Quarterly. January, April, July, October.
Dunklin	Monthly. Second Tuesday.
Franklin	Monthly. First Tuesday.
Gasconade-Maries-Osage	Semi-Annual. Fourth Thursday, April and October.
Greene	Weekly. Saturday.
Grundy	Quarterly. July, October, January, April.
Harrison	Quarterly. Third Tuesday, January, April, July, October.
Henry	Quarterly. Second Wednesday, Dec., March, June, Sept.
Holt	Quarterly. First Thursday, January, April, July, October.
Howard	Monthly. Third Tuesday.
Howell	Bi-Monthly. First Thursday of Dec., Feb., April, June, Aug., Oct.
Iron	Monthly. First Saturday.
Jackson	Semi-Monthly. Second and Fourth Thursdays.
Jasper	Semi-Monthly. First and Third Mondays.
Jefferson	Monthly. Fourth Tuesday.
Johnson	Quarterly. June, September, December, March.
Knox	Monthly. First Monday.
Laclede	Quarterly. Second Monday, Jan., April, July, Oct.
Lafayette	Monthly. Second Tuesday, Jan., Mch., May, July, Sept., Nov.
Lincoln	Quarterly. May, August, November, February.
Linn	Quarterly. October, January, April, July.
Livingston	Monthly. Third Wednesday.
McDonald	Quarterly. Second Wednesday, Jan., April, July, Oct.
Macon	Monthly. Second Tuesday, 10 a. m.
Madison	Semi-Monthly. First and Third Monday.
Marion	Monthly. First Friday.
Mercer	Monthly. Second Thursday.
Miller	Quarterly. First Thursday, March, June, Sept. Dec.
Mississippi	Monthly. First Monday.
Moniteau	Quarterly. March, June, September, December.
Monroe	Quarterly. First Tuesday of April, July, October, January.
Montgomery	Monthly.
Morgan	Quarterly. First Wednesday of March, June, Sept., Dec.
New Madrid	
Newton	Monthly. Second Tuesday.
Nodaway	Monthly. Second Tuesday.
Pemiscot	Quarterly. First Tuesday, January, April, July, November.
Perry	Monthly. First Wednesday.
Pettis	Semi-Monthly. First and Third Monday.
Phelps	Quarterly. March, June, September, December.
Pike	Monthly.
Platte	Monthly. First Wednesday.
Pulaski	Quarterly. November, February, May, August.
Putnam	Monthly. First Wednesday.
Ralls	Quarterly. January, April, July and October.
Randolph	Monthly. Second Tuesday.
Ray	Monthly. Third Wednesday.
Reynolds	Quarterly. January, March, June, October.
Ripley	
Saline	Monthly. Second Tuesday.
St. Charles	Monthly.
St. Clair	Quarterly. Second Tuesday, March, June, Sept., Dec.
Ste. Genevieve	Monthly. Second Wednesday.
St. Louis	Weekly. Saturdays.
St. Louis County	Monthly. Second Wednesday.
Schuyler	Semi-Annually. July and December.
Scotland	Monthly. Second Tuesday.
Shelby	Quarterly. June, September, December, March.
Stoddard	Quarterly. First Wednesday, March, June, Sept., Dec.
Sullivan	Monthly.
Vernon	Quarterly. First Tuesday, March, June, Sept. and Dec.
Warren	Monthly.
Washington	Monthly. First Saturday.
Wayne	Monthly.
Worth	Monthly. Second Wednesday.

AMERICAN MEDICAL ASSOCIATION.

Next Annual Meeting at Boston, Mass.
President-Elect: WM. J. MAYO, Rochester, Minn.
President: LOUIS S. McMURTRY, Louisville, Ky.
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Sixteenth District.—R. L. Johnson, Rolla. Counties: Dallas, Crawford, Phelps, Pulaski, Laclede, Dent.

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Eighteenth District.—H. C. Shuttee, West Plaines. Counties: Ozark, Oregon, Howell, Texas, Wright, Shannon, Douglas.

*Counties in black type are unorganized.